AN ABSTRACT OF THE THESIS OF

ANTHONY JOSEPH BUHL for the DOCTOR OF PHILOSOPHY
(Name) (Degree)

in Education (Counseling) presented on June 4, 1970
(Major) (Date)

Title: THE COMPARED PERCEPTIONS OF A SENIOR HIGH SCHOOL BY TEACHERS AND STUDENTS AS MEASURED BY THE STERN HIGH SCHOOL CHARACTERISTICS INDEX

Abstract approved: Redacted for Privacy
William Crooks

Purpose: This investigation was conducted to determine whether or not teachers and students perceive the environmental press of a secondary school differently, and whether or not teacher groups and student groups vary in their perceptions.

Conceptual Framework: "Press" is a construct which expresses the assumption of elements in the environment which generate forces that are perceived by individuals and which affect their behavior. Press is of two types: Alpha press, which corresponds to the explicit or intended goals of the institution's major participants; and beta press, which corresponds to the implicit or actual goals manifested in the behavior of the major participants.

Hypotheses: 1) teachers perceive the school's press differently than do students. 2) teachers' perception of explicit press is a function of various teacher characteristics. These are sex, age,

teaching experience, academic preparation, and marital status. 3) students' perceptions of implicit press is a function of various student characteristics. These are grade level, sex, academic achievement, future educational plans, and parents' level of educational attainment.

Procedure: The Stern High School Characteristics Index (HSCI) was administered to 270 randomly selected students, and to the entire faculty of 86 teachers in a senior high school in the Pacific Northwest. The assumptions were that 1) teachers' responses to the HSCI items represented their perceptions of explicit press, 2) students' responses represented their perceptions of implicit press. Teacher and student questionnaires identified the independent variables in Hypotheses Two and Three respectively. A 't' test was used for the first Hypothesis in comparing the mean scores of teachers and students on each of the 30 HSCI scales. Analysis of variance was applied to test the second and third Hypotheses. The criterion of significance was the .05 level of confidence.

Major Findings: Hypothesis One: Significant differences were found between teachers and students on 17 HSCI scales. These were conjunctivity, deference, ego achievement, energy, harm avoidance, humanities, nurturance, objectivity, reflectiveness, science, sensuality, succorance, understanding, abasement, adaptability, change, and dominance. Teachers obtained higher scores than students on all but the latter four.

Hypothesis Two: Perception of explicit press by teachers was found to be a function of sex, age and academic preparation. Differences were found between males and females on eight HSCI scales. Men perceived higher scores than women on all eight. Teachers under 30 years of age differed from those over 29 on seven scales. Teachers who taught subjects conventionally considered academic differed from teachers in non-academic areas on five scales.

Hypothesis Three: Perceptions of implicit press by students was found to be a function of grade level, sex, and academic achievement. Differences were found between sophomores, juniors, and seniors on eight HSCI scales. Sophomores received the highest scores on all eight. Differences were found between males and females on nine scales. Females received the highest scores on eight. "A and B" students differed from "C and D" students on five scales. "C and D" students received the highest scores on four.

Implications: 1) Secondary teachers perceive the institutional press differently than students within the same environment. 2) Teachers' perception of institutional press is a function of sex, age, and academic preparation. 3) Students' perception of the educational environment is a function of sex, grade level, and academic achievement.

The Compared Perceptions of a Senior High School by Teachers and Students as Measured by the Stern High School Characteristics Index

by

Anthony Joseph Buhl

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Philosophy

June 1971

APPROVED:

Redacted for Privacy

Professor of Psychology
in charge of major

Redacted for Privacy

Dean of the School of Education

Redacted for Privacy

Dean of Graduate School

Date thesis is presented June 4, 1970

Typed by Gwendolyn Hansen for Anthony Joseph Buhl

Dedicated to:

My loving wife

ACKNOWLEDGEMENTS

The writer wishes to extend his sincere gratitude and appreciation to those who devoted their knowledge, time, and efforts in the preparation of this dissertation. Those people are:

My committee members who provided constructive criticism thereby contributing to the development of greater clarity: William Crooks, Chairman, Department of Psychology; Theodore Madden, Associate Professor of Psychology; Dennis Baron, Professor of Education; Tilman Cantrell, Professor of Sociology; and Jack Hall, Professor of Education.

Dr. William Crooks, my major professor, and Dr. Theodore Madden, both of whom provided me with encouragement, excellent suggestions, and freedom to pursue the study at my own pace.

Students and teachers in Capitol City High School who devoted their time to the study, and by their participation made the research possible.

Other personnel in Capitol City High who cooperated with me in completing the research. Mr. Flescher, Mr. Broderson, Mr. Barker, Mrs. Giles, and other members of the counseling staff.

Carol Settles in the computer center for her advice and assistance in programming.

Bruce Olson in the Department of Statistics.

Oregon State University for making funds available which were used to offset computer and programming costs.

My wife, Audrey, who gave me support and encouragement to persevere during some the most discouraging and trying moments. She provided the home atmosphere which allowed me to work free from interferences.

TABLE OF CONTENTS

LIST OF TABLES

THE COMPARED PERCEPTIONS OF A SENIOR HIGH SCHOOL BY TEACHERS AND STUDENTS AS MEASURED BY THE STERN HIGH SCHOOL CHARACTERISTICS INDEX

CHAPTER I

INTRODUCTION

It has often been said that human beings do not grow up in a void, that their development and maturation are not only dependent upon the physical environment as the biologist has shown, nor only on the family environment as Freud had theorized, but on the larger framework of culture, society, and all its institutions (Herr, 1965a). Callahan believes that "cultural forces act upon the basic biological inheritance of the individual to make him what he is" (1966, p. 4). Environmental conditioning is largely responsible for shaping the developing individual in a particular direction.

Field theory contends that behavior is the outcome of the transactional relationship between the individual and his environment (Gage, Succi, 1951; Combs, Snygg, 1959). According to Combs and Snygg "All behavior without exception is completely determined by and pertinent to the phenomenal field of the individual" (1959, p. 21). They do not mean, however, to negate the differences in individual predispositions and inherited biological composition, but simply to minimize their importance in favor of an emphasis on the present stimuli which confront the organism.

Others have explained the individual's relationship to his

environment in this manner: "In the exchange between the individual and environment, both give to each other and both are affected, to some degree altered, by the exchange" (Stern, Stein, Bloom, 1956, p. 35). The immediate physical environment is both the potential and actual source of a variety of stimuli which are of varying significance for the organism. The individual responds to some, and is seemingly oblivious to others. These stimuli consist of people, institutions, situations, tasks, rewards, penalties, as well as numerous factors of physical and biological significance (Stern, et al., 1956).

One of the basic institutions in American culture is the school. Early educational research tended to emphasize the study of students apart from the environment in which they functioned. It would appear necessary, however, to examine the setting in which the student behaves; its physical facilities, administrators, teachers, counselors, peers, activities, curriculum, etc. in order to gain better insight and understanding of students. Callahan believes that

> The effects of the surrounding world on pupil behavior must be recognized and understood in order to plan and teach with insight and effectiveness. Of particular concern to the instructional process are those environmental factors related to the home, the peer group, and the school (Emphasis added by this writer)(1966, p. 4).

Danskin, Kennedy and Friesen call attention to this fact when they state that

> Education must consider the interaction between the individual and his environment. Education must understand

> the relation between the student and his surroundings for indeed it is difficult to determine where one begins and the other leaves off and therefore must be considered as a psychological unit (1965, p. 31).

The school as an institution is part of the physical and psychological environment of the student. However, it is an important part since it is a place where he spends almost half of his waking time for nine months of the year. It is in the school that the adolescent meets his friends, has extended contact with adults in the person of teachers, and formulates and synthesizes his ideas. Jersild put it this way:

> The school has a powerful influence in shaping an adolescent's concept of what he is and what he might be. Through many years he has had opportunities and limits. He has had opportunities to know how it feels to succeed and to fail, what it means to be accepted or to be ignored and rejected. (1957, p. 277).

The school is the central focal point for the teenager and his peers.

It has been pointed out that the school environment itself cannot be assumed to be identical from school to school. The type of climate characteristic of various institutions is quite different and is supportive of different kinds of student and staff behavior (Walz, Miller, 1969; Winfrey, 1963). Jones contends that

> In some schools the value placed by students upon superior attainment is high, in others it is low. Such student values are of extreme importance and can usually be developed by the school itself with the support of the home and community. This 'Climate' of the school often becomes traditional (1951, p. 33).

Different schools are also seen as organizations which have their own norms, goals, objectives, and standards of behavior. In a comprehensive study of ten secondary schools, Coleman (1961) found a number of student subcultures, each exerting pressures on its members to accept its own values, norms, attitudes, and general patterns of behavior. Peer pressure differs among schools and within particular schools in accordance with the values of various subgroups present in the school.

Stern et al. similarly refer to the institutional press (see definition number 3 on page 13) within a school as creating different climates. They point out that press varies among educational institutions, and even within a school, depending upon the demands made of students by their peers or by school personnel.

It seems quite obvious that a great part of the atmosphere or climate of a school is created by the interaction of the people in it. The types of relationships students have with administrators, counselors, and teachers, will greatly influence their perceptions of the institution. Combs and Syngg point out that school climates are

> . . . not accidental, nor are they a matter of physical environment alone. Atmospheres are created out of the interaction of people with one another. The climate for learning is the product of the kinds of interactions students have with their teachers. The fact that a teacher is unaware of or doesn't care about the atmosphere he creates with his students does not change the fact. Atmospheres provide the stage upon which learning occurs and arise out of the interaction of teachers and students. They can be ignored only

> at the risk of making the process of learning haphazard and inefficient (1959, p. 388)

Gordon suggests that

> We are not always aware of what it is that is being taught, and are even less aware of what it is that is being learned. But we can be sure that the total school environment--people, plans, materials and organization--is acting as a vital socializing force in the life of the child (1956, p. 85).

Nevertheless it seems adults generally and teachers particularly do not understand the way youth perceive their world. Coleman (1961) has shown that because parents, teachers, and adults in general have become so thoroughly involved in their jobs, the daily intimate contact with children has been drastically reduced. As a result youngsters develop their own "adolescent society" with but a remote link to the outside society. The child, cut off from the major segment of society, has been forced inward toward his own age group. As a consequence, adults and teenagers live in a world so much their own, and so isolated from each other, that each group is quite unfamiliar with the ways of the other--their perceptions of the world around them, the things each considers to be important, and how the other spends his time.

It would seem then that if the environment of the school seriously affects the behavior of the student, school personnel would need to have a clear understanding of these environmental forces. This would permit the conscious attempt to create a school climate

conducive to effective education. Gordon has said that

> . . . the child is subjected to a great many cultural pushes and pulls during his growing up. Different individuals take over different cultures in different ways. We need to understand the impact these various societies might have upon the child, to understand the social agencies in this process. . . (1956, p. 74).

Jones (1968) suggests that counselors and school personnel should be sensitive to the students' perceptions of the forces impinging upon them so that the staff can then try to foster climates that maximize the probability that the school's objectives are achieved.

Alteration of behavior toward desirable ends can be greatly facilitated when the school staff understands how they individually and as a group perceive the school situation in comparison to the perceptions of various groups of students. For, as some have succinctly indicated,

> It is no more possible to predict the behavior of an individual in a situation without referring to the situation then it is to predict the behavior of an individual without considering the conditions under which this action will be manifest (Stern et al., p. 35).

Statement of the Problem

The present research has been designed to study the perception by students and teachers of a particular secondary school environment. Specifically, answers were sought to four primary questions which would seem important in educating high school youth.

1. What is the press of the school environment as it is perceived by the students within a particular high school?
2. Is the environmental press within the school perceived by teachers congruent or incongruent with the press as perceived by its students?
3. Do different groups of students with respect to certain independent variables, perceive the press of the school environment similarly or differently?
4. Do different groups of teachers with respect to certain independent variables, perceive the press of the school environment similarly or differently?

Purpose of the Study

It has been pointed out above that school climates differ; and that the atmosphere of an educational institution may be a significant factor in the achievement of the goals and objectives implicit in the school's operational philosophy. The purpose of the present investigation was to examine the perceptions of the school environment by students and by faculty in order to determine whether any differences existed between these two groups.

The study was further intended to analyze the environmental perceptions of students and faculty as related to certain independent variables for each group. The variables explored for students were

sex, grade level, academic achievement, educational plans, and the educational level of the parents. For teachers the variables studied were sex, marital status, age, academic preparation, and the number of years of experience within the school.

Need and Significance of the Study

A systematic study of the school environment and the way teachers and students perceive it appears to be essential for a number of reasons.

First studying the school as a psychological unit, an environment in which students and faculty interact, is a relatively new approach. This research technique has been applied more often in the study of college and university environments and only infrequently at the secondary school level.

The investigations that have been conducted in high schools in the past have neglected to examine the environmental perceptions of teachers (Winfrey, 1963; Cauldhill, 1966; Herr, 1965b; Stegman, 1967). To neglect to analyze teachers' perceptions is to disregard the group which is largely responsible for creating the existing climate. Barclay (1967) has shown quite clearly that to a great extent faculty determine the press felt on the part of students. It would seem imperative, therefore, that teachers be aware of their own views of the school environment as well as the views of their students.

Such information would seem useful to teachers. For example, teachers might use the results as a basis for comparing their environmental perceptions with each other, or with those of students. Faculty, individually or as a group, may want to use the knowledge of their perceptions as a guide for planning various strategies in their approach to students (Walz, Miller, 1969).

Secondly, previous research has found that school environments differ from one school to another (Coleman, 1961; Winfrey, 1963; Stegman, 1967; Walz, Miller, 1969). Information obtained from other environmental studies cannot be generalized to apply to specific institutions, although some common characteristics may exist among schools. Each school has a unique environment or climate which must be examined in order to understand it.

Once the features of a particular school climate have been identified, various approaches may be developed to change the school climate toward desired ends. Some data exist which seem to indicate that the success of an institution is partially dependent upon the degree to which the expectations of its students and the press of the institution are congruent. Duling states that

> If the secondary school is to meet its goals and objectives, it would then seem necessary to investigate and study the relationship between the students and the school environment as it is perceived by them (1969, p. 130).

Thirdly, few studies have been conducted on the high school

level which have taken various student characteristics into consideration as variables relative to the possible differential perceptions of the school environment (Winfrey, 1963; Herr, 1965; Cauldhill, 1966). The results of those studies have been inconclusive. However, it would appear that if subcultures are present in secondary schools, as Coleman has indicated, each of these identifiable groups might also perceive the school situation differently.

The probable identification of diverse groups of students, each with their own unique perceptions of the school, suggests the necessity of developing distinct teaching procedures for the respective groups. Educational literature is replete with respect to the treatment in the classroom of individual differences. However, it may be a more rational and realistic use of the teacher's time to identify groups of students with common characteristics and needs, and proceed to develop special teaching techniques for them rather than for every individual student. Teachers then, would need to be sensitive to any discrepancy between their perceptions and those of the student groups.

The identification of the environmental perceptions of various groups within the school would appear to have significance for curriculum development and innovation. It might no longer be prudent to expect all students to maintain an interest in the presently available subjects. Awareness of the way groups of students view the school

may suggest the direction toward which curriculum expansion should move in order to create greater relevancy for students. Joyce and Harootunian in their discussion concerning "shaping the school" have said that

> The most complex intellectual process is making the decision that creates the environment of the school--the milieu in which education takes place. This process is complex . . . because in order for . . . the decisions to be made requires a good deal of specialized knowledge about students, their society . . . and that the . . . school exists not in a vacuum but in a context of people and events that influence and are influenced by educational decisions (1967, p. 45).

Limitations of the Study

The present study was complicated by certain insurmountable difficulties and these were therefore accepted as limitations. It would seem important to view the results in light of these limitations.

1. Perception is a complex configuration of an individual's phenomenal world which is unique and peculiar to him. This creates a difficulty in quantifying the perceptions of one's subjective experiences in standard, symbolic, terms. Language in general, and psychological measurement devices in particular, seem inadequate for picturing one's internal feelings about the world. These methods can only hope to be approximate descriptions of what one experiences.

2. Perception is entirely subjective. The study of perception can be accomplished only by the verbal report of the individual being

examined. The validity of the study then becomes dependent upon the respondent's honesty and interest in reporting aspects of his phenomenal world. The verbalizations may not actually correspond to how one perceives his environment, but may be influenced more by his needs and the interest he has in sharing his phenomenal world with others.

3. Perceptions are not static but seem to exist in a constant state of flux. Each new experience which is assimilated into one's self-concept may influence his subsequent views of his environment.

4. The instruments and techniques which are presently available to measure perception are elementary and imprecise. Tests such as the one used in this study span only a small segment of an individual's cognitive structure with regard to a particular environment. However behavior seems to be influenced by the total configuration of the psychological field rather than merely the sector chosen for quantification.

5. In a large institution such as the school studied, the environment may not be perceived by any individual as a total unit. The school may be a variety of subunits. Judgments about the whole may be made from one's limited contact with a number of these smaller segments, or from what one "believes" to be true about them. The instrument used in the study did not enable students to refrain from responding to questions concerning unfamiliar elements of the school. It appears therefore, that an unknown number of responses to the instrument are

merely the teachers' and students' unverified opinions about certain parts of the school environment.

6. A variety of factors influence perception. The independent variables studied in the present research are but a few of all those factors which affect perception. No doubt other variables besides those investigated have an impact on perception.

Definition of Terms

1. School environment, atmosphere, and climate will be used in the study interchangeably. These terms will refer to those general physical and psychological conditions which prevail at the school. These conditions include buildings, their facilities, the interaction of school personnel with students and with each other, the students' interpersonal relationships in the school, the activities, curriculum, and any other similar factors in the school which may affect the behavior of students and staff.

2. Perception. A general term which refers to an individual's awareness of various objects or events in the environment. It is a person's experience of his phenomenal world as he senses it in seeing, hearing, feeling, smelling, and tasting.

3. Environmental Press. Those aspects of the physical and psychological field which are more salient to the subjects than others. The more obvious elements stand out as figures against ground. Press

is generated by these elements in that they create demands for certain types of behavior. Conformity to these demands is reinforced and deviation is punished. In this study press will refer to teacher and student responses to the items of the instrument which was used.

4. Capitol City High School. The secondary school in the study. This is a fictitious name.

5. Student. Any person, enrolled as a sophomore, junior, or senior in Capitol City High School for the purpose of receiving classroom instruction.

6. Teacher. Any individual who has graduated from an accredited teacher education institution with at least a Bachelor of Science or Bachelor of Arts degree in teacher education, and who is presently under contract in Capitol City High School for the purpose of instructing students.

7. Academic Subjects. These subjects are characterized by their abstract nature and are specifically the following: Languages, Humanities, Social Sciences, Physical Sciences, and Mathematics.

8. Non-Academic Subjects. These subjects are characterized by more physical "activity" and are specifically the following: Art, Music, Business Education, Home Economics, Industrial Arts, Physical Education, and Health.

Summary

Behavior is affected by environment. The environment is a source of stimuli, some of which are perceived by individuals, thereby affecting their behavior. The school is the environment which provides many stimuli affecting student behavior. It appears, therefore, that the elements which comprise the school's physical and psychological environment must be studied in order to better understand the student. This study will seek to investigate the school environment and how it is perceived by teachers, groups of teachers, students, and groups of students.

CHAPTER II

REVIEW OF RELATED LITERATURE

In this chapter, literature related to the present investigation will be reviewed. The chapter is organized into three sections. Because the stress youngsters realize stems at least partly from the environment, the first section will review studies which have investigated the problems experienced by youth. Secondly, teachers' behavior toward students seems to be a function of certain student characteristics as well as their own. Therefore, available research related to teachers and the press they place upon students by their demands will be examined. Finally, studies will be reviewed which which have been exclusively concerned with environmental press in educational institutions.

Section I
Some Sources of Student Stress

The following section concerning students is based on the premise that the environment influences and shapes the types of problems experienced by adolescents. Four factors will be examined here; the school, the adolescent's peers, his sex, and his general characteristics.

The School

According to one author "Students' stress can be seen as related to problems of human development accentuated by pressures of the school experience" (King, 1964, p. 328). This pressure, however, appears to vary among schools and seems to affect various groups of students differently (Lund, 1967).

Research has documented the contention that the school is the real source of many problems described by adolescents. One investigation found that when students were asked "What are the sources of stress that you experience?" 20 percent replied pressure placed upon them by the school to improve their work (Whitely, 1967).

Another investigation found that students in two different secondary schools were in remarkable agreement on the types of problems they experienced. Of the 15 most important concerns expressed by these students, seven were directly related to educational curriculum, teaching procedures, and school work. Six more were indirectly related to the school, since they concerned the students' educational and occupational future. The startling fact however, was that counselors in these schools did not perceive the pressures students were experiencing (Biglow, Humphreys, 1967).

Two separate studies found the school to be an important concern to adolescents. Abel and Gingles (1965), in an extensive

investigation involving 2,500 ninth and tenth grade girls, reported that the predominant problem area checked on the Mooney Problem Checklist was "adjustment to school work." Mooney (1943) discovered that nearly half of the students he studied mentioned worry over examinations, problems in studying and concentrating, and low academic achievement.

Another study showed that when secondary school students were asked about their fears, a large percentage indicated that those fears were derived from the school. For example, students reported fears relating to school tests, grades, making speeches and oral reports before a class, answering wrongly in class, and of not playing well in athletic events. Some students said they were afraid of their teachers or wanted to be recognized by them (Noble, Lund, 1951).

A concern about the adolescents' relationship with their teachers was frequently noted in the research literature. One study indicated that 40 percent of the secondary school students mentioned problems they were having with teachers (Schmuck, 1965). Another investigation of 1,300 senior high students found that the four most important problem areas all related to the school; and that the most important of those four was "relations with teachers" (Moore, 1950).

In a study comparing the parents', faculty's, and administrators' perceptions of student concerns, conclusions were drawn which showed that three of the four groups believed school to be the area responsible

for the greatest number of student problems. This study was conducted in six schools with no wide difference being found among the schools (Grow, 1956).

In light of the evidence cited here, it seems that the school environment is indeed an important source of student stress. Teachers and peers largely determine the press exerted on each student and on various groups of students within the school environment. The teachers' function in determining press will be discussed more extensively in a later section.

Peers

To what extent do adolescent problems arise from their relationships with peers? Research evidence shows that adolescents are extremely conscious of their peers. They experience constant pressure placed upon them by fellow students. Coleman, in an extensive study of 10 high schools, has shown that adolescents have developed their own society. He says that "The teenager is in a society whose habits are the halls and classrooms of the school, the teenage canteens, the drugstore, the automobile, and numerous other gathering places" (1961, p. 3).

Because this teenage culture is not part of the adult world, Coleman believes adolescents develop their own values, attitudes and standards of behavior. Many adolescent aspirations and models are

determined by peers rather than by adults; in Coleman's study, they were found to be quite different than parents and teachers would have liked.

Coleman noted that many teenagers emphasized getting in the "leading crowd." For boys, this is accomplished by "personality," "reputation," "athletic ability"; for girls, friendliness, "goodlooks," and academics are important. Coleman concludes that

> To be popular with the opposite sex the emphasis is on the physical, with one's own sex, the emphasis is on the academic. Yet adults overlook this fact even though they themselves do likewise in their worlds (1961, p. 28).

> Moreover students feel it is best not to be seen as too bright. In other words at the top level of scholarship the holding down effect seems to operate (1961, p. 49).

Nevertheless, parents and teachers place constant pressure upon students in the opposite direction, that is toward academic achievement. This poses a genuine dilemma for students.

Others have reported findings similar to those of Coleman. One investigator found that about a third of the students he studied indicated that they were concerned because their personal values clashed with those of their friends. A similar number were worried about the difficulty they were experiencing in retaining friends (Schmuck, 1965).

A number of investigations have found that adolescents consider peer relationship important. Noble and Lund (1951) discovered that students fear peer ridicule, unpopularity and losing friends. Three

separate studies reported finding adolescents concerned about their relationships with boys and girls, recreational and social opportunities, and social psychological relationships (Moore, 1950; Mooney, 1943; Abel, Gingles, 1965).

Available data also suggest that acceptance by peers is related to academic success. Mumas (1965) concluded that individuals who are highly accepted by their peers are more successful academically than other students, and conversely, that those individuals who are highly rejected are less successful academically than other students. The trend clearly shows a relationship between peer choice and academic performance.

Adolescents appear to exert pressure on each other through their conformity demands. Peers seem to be a more potent source of press than parents and teachers, since it is this group with whom teenagers have the greatest and most extended contact. It can be safely concluded that peers are an important source of press for the developing teenager.

Student Sex

Problems vary for each sex. A portion of these problems may be primarily biologically based, i. e. related to size, strength, constitutional makeup, etc. However, it appears quite evident that because culture has different behavioral expectations for each sex,

the press perceived by males will differ from that perceived by females.

Hoedel (1965) believes, for example, that school is primarily geared for boys. She contends that girls have fewer outlets than boys and so turn to academics; that boys differ from girls in motives of preference in school studies; that girls are more subject to social pressures that propel them to the opposite sex; and that boys are restricted in their source of confidantes. These alledged differences should be reflected in the types of problems that male and female students report.

Research lends support to Hoedel's contention. All the studies examined found that girls experienced more problems than boys. Garrison and Cunningham (1952) report that ninth grade girls reported an average of 36.3 problems as compared to 30.6 for boys. Another investigation, which involved junior high school students, found that girls marked an average of four more problems than boys (Hayden, 1956). A third reports that ninth grade girls had five times as many problems as ninth grade boys (Starr, 1953). Finally Lund (1967) notes that females experienced a higher frequency of problems than males.

The differences in the number of problems reported by the sexes may not be as important as the kinds of stress they describe. Girls more frequently experienced problems in such areas as the home, physical development, and most often in relations with other people and boy-girl relationships. Males on the other hand reported more

difficulty relating to the school itself (Garrison, Cunningham, 1952; Hayden, 1956).

These studies suggest that adolescent problems are related to sex. Boys and girls experience a different number of problems as well as a different kind of stress. To what extent these are biologically determined is presently not clear; however it is likely that the different cultural expectations contribute to the creation of different kinds of problems for boys and girls.

Other Characteristics

Scattered research evidence illustrates that intelligence level, scholastic achievement, and socio-economic background are related to adolescent stress. Starr (1953) and Hayden (1956) in separate research, both found that students with a lower intelligence level experienced more problems. The former reported that less intelligent students reported 10 times as many problems as bright students.

Combs (1964) discovered that underachievers who were academically capable, i.e. intelligence quotient of 115+, saw themselves as less adequate, less acceptable to others and were less tolerant of adults.

In a study concerning student characteristics of high school students among various income groups differences were noted. Comparisons were made between students from three income groups,

high, middle, and low. It was found that high income pupils were the most likely to participate in school and out-of-school activities; to get higher marks in school; to be named to the honor roll; to successfully complete courses in school; and to continue their education beyond secondary school (Coster, 1959).

Summary

In this section an attempt was made to demonstrate that different groups of students experience different kinds of problems as well as to varying degrees of problem involvement. This stress stems at least partly from the environment. For example, a school which demands a high level of achievement may provide a stressful environment for a student who has little scholastic aptitude; expectations may differ with respect to male and female behavior; conformity demands by peers may press adolescents to alter their values, attitudes, and standards of behavior even though they have no wish to do so. In general, a safe conclusion seems to be that various adolescent groups experience different types of problems which are partly the result of environmental factors.

Section II
Teachers as a Source of Student Stress

Teachers are a major source of press in the school as it is experienced by the students. Their behavior toward adolescents determines to a great degree the press students perceive. The teacher's demands of the students, his daily treatment of them in the classroom, his periodic evaluations, and his personality can all have an effect upon the way in which the student perceives the school environment. Schmuck points out the teacher's role in this respect by commenting that

> While relationships with parents are important for the adolescent, more and more I have come to the conclusion that relationships with teachers and peers also play a major part. In a recent study of Junior and Senior High School students, Van Egmond and I have found that perceptions of the teacher's emotional support was by far the most potent facilitator of academic performance in both sexes. In fact the high school pupil's relationship with his teacher was the most significant indicator of his school adjustment (1965, p. 19).

In light of the teacher's function in creating school climate, the discussion will first examine the teachers' differential treatment of students in relation to particular student characteristics; and secondly will pay attention to teacher behavior toward the student as a function of certain teacher characteristics.

Teacher Behavior Related to Student Characteristics

If teachers behave differently toward different groups of students, these groups should then perceive the press of the environment differently. This has been suggested by the findings of an investigation which discovered that the effect of teacher behavior on the student's self-concept varies with such factors as the student's sex, father's occupational status, I.Q., grades received, and having repeated a grade (Perelli, 1966). Certain of these factors will presently be examined individually.

Student Sex. The student characteristic most frequently studied is sex. Many researchers have examined teacher behavior in the classroom toward male and female students.

In most of the studies reviewed teachers responded more favorably toward girls than toward boys. One research finding reports that teachers more often saw boys as "not getting along" (Turner, 1962). Other investigators found that boys received a larger number of dominative, or disapproval evaluations from their teachers than girls. Moreover boys recognized that they were the recipients of a higher incidence of teacher disapproval (Meyer, Thompson, 1956; Weinstein, Geisel, 1960; Sears, Feldman, 1966).

The kinds of disapprobation given to male and female students also appears to be quite different. One finding indicates that 40

percent of the criticism received by girls was for lack of knowledge, whereas only 26 percent of teacher disapproval of boys was for this reason. Males were reprimanded more often for rule violations and for inattention (Sears, Feldman, 1966).

Available evidence suggests that teachers grade the two sexes by different standards. Although no differences could be found among the students studied with respect to intelligence or class achievement as measured by standardized achievement tests, marked differences were noted in the grades assigned by teachers; differences clearly not attributable to chance. These discrepancies in grading students generally gave undue advantages to girls. The findings clearly demonstrated that females were no smarter, did not know more of the subject material, but received higher marks (Carter, 1952).

Two separate studies found that teachers believe girls are better adjusted to school than boys (Weinstein, Geisel, 1960; Ausubel, Schiff, Zeleng, 1954). This may be because patterns of behavior for boys are more overt and manifest while girls deal with their problems intrapsychically. It seems that "Teachers award girls more favorable ratings because they lack awareness of the manner in which girls are making their significant adjustments" (Weinstein, Geisel, 1960, p. 721).

These facts suggest that teachers, either consciously or unconsciously, favor female students in school. It is predictable that males should perceive this preference on the part of teachers and feel it as a

type of pressure. Some authors have said

> The fact that boys dislike school more than girls is understandable in light of the findings. The environment must certainly be anxiety producing for boys and cause more adjustment problems for them in the school (Meyer, Thompson, 1956, p. 392).

Student Achievement. A teacher's understanding of students appears related to students' academic achievement. One study found that when teachers possessed an increased knowledge of the personal concerns and backgrounds of students, these students not only made significantly greater gains in achievement, but also rated their teachers significantly higher as instructors (Sturgis, 1960).

Another study approached this problem in reverse fashion. It was discovered that the higher the student's achievement, the greater the awareness of the student's problems and concerns on the part of the teacher (Volpe, 1965).

Others have found that teachers tend to have more knowledge of pupils who are above average in intelligence, have average or above average grades, are highly motivated, exhibit behavior acceptable to teachers, and come from the better homes of the community. In general, teachers have more knowledge of the better pupils than the poorer ones (Ausubel, Schiff, Zeleng, 1954; Nunnery, Gilliam, 1962).

Further explanations, however, may account for the above findings. Teachers may be more acutely aware of the personal backgrounds of high achievers because these students reflect values

commonly held by teachers. One investigator found that teachers and superior achievers are most similar in values. Underachievers and par achievers tended to hold like values. The value similarity between teachers and superior achievers may imply more than value conformity, and may result in biased grading because of the nature of the values apparently shared (Sprinthall, 1964).

Whatever the reasons, it seems that teachers behave toward high achievers in a different manner than toward scholastically below average students.

Student Socio-economic Level. Rich (1960) and Hackler (1961) believe that most teachers have a middle class background and that as a group they hold similar values and attitudes. According to these authors middle class values include, ambition, responsibility, planning for the future, courtesy to others, the control of physical aggression, and constructive use of leisure time. These teachers seek to train children in middle class manner and skills so that often there is a clash of values between students and teachers. Hackler put it this way:

> The child from the slum usually has different values and is therefore not understood by the teacher. Thus it is here that day after day most children in the lower fourth of the distribution have their sense of worth destroyed, develop feelings of insecurity, become frustrated. . . (1961, p. 457).

Studies support these contentions. One investigation discovered

that when teachers were asked to select 10 students in their class whom they most preferred and 10 whom they least perferred, all the children placed on the preferred list belonged to the middle and upper classes and not one belonged to the lower class. However, of the least preferred, most came from the lower class with one from the middle class and none from the upper class. Eargle (1963) and Cheyney (1966) report that in teacher attitudes toward the disadvantaged, the overwhelming majority of teachers and supervisors rejected these children and looked upon them as inherently inferior.

The evidence points to the conclusion that teachers tend to treat students from various social classes differently.

Teacher Behavior Related to Teacher Characteristics

Little research has been conducted on teacher characteristics in relation to teacher behavior toward students. The studies which are available report contradictory and scattered findings. Yet, it seems obvious that behavior expectations in American society are not alike for different groups. There are differing behavior standards for males and females; and for the married and unmarried. Younger people generally have different values than the older generation. Such factors might affect teacher behavior. Accordingly, literature which relates to such factors will presently be reviewed.

Teacher Sex. The most frequently studied teacher characteristic

is sex. The findings are mixed and cannot be compared, since all these studies were attempting to measure different phenomenon related to teachers' sex. However, from the juxtaposition of these studies some relationships may be seen.

One investigation sought to determine the criteria teachers used in rating student adjustment. The results showed that male teachers are more inclined to value maturity, good judgment, dependability, and trustworthiness. Men tended to characterize the best adjusted students as secure persons, and lacking in self-consciousness. Females, on the other hand, placed a greater emphasis on "good" character, humility and modesty. Women placed more stress on negativism, i.e. hostility to authority (teachers), discipline problems, etc. as a criteria for poor adjustment (Beilin, Werner, 1957).

Stouffer and Owens (1955) asked teachers from kindergarten to grade 12 to list the types of problems students experience. It became evident that men and women teachers differed in their reporting of these problems.

Carter (1952) found that in addition to teachers favoring female students in grading, assignment of grades was related to teacher sex. Although all teachers in grading penalized boys, the penalty was not as great if the teacher was a man.

Teacher sex is suggested as a factor in the differential behavior toward students on the part of teachers.

Marital Status. Hanson (1963) hypothesized that marital status may affect teacher behavior. Fifteen principals were asked whether they thought marriage improved or reduced the teacher's classroom efficiency. Eleven believed that women teach as well after marriage as before while two felt they teach less well after marriage. Eight of the principals felt men teachers taught better after marriage and seven could not detect any change. In general it was concluded that marital status has little effect upon the teacher, although exceptions were noted.

Other Teacher Characteristics. Teacher classroom experience has been studied by a few investigators. Dobson (1965) found that teachers with 3 to 10 years of teaching experience differed significantly from teachers with more than 10 years experience as to what constitutes a behavior problem. The latter group tended to view undesirable acts as of a less serious nature than the former.

Hill (1965) observed that more extensive experience is not necessarily conducive to greater efficiency in the teaching-learning process. Teachers, it was pointed out, at about the end of the seventh year, become more interested in outside things than in teaching.

Baker (1966) found that a teacher's knowledge of student characteristics was significantly related to his association with extra-curricular activities. The more associations in which the teacher participated the more accurate was his knowledge of pupils.

Crowley (1960) noted differences in how well teachers knew and understood their students. Differences were found between female and male teachers' knowledge of student backgrounds. Academic teachers were more accurate than vocational teachers, and consistent differences were found between responses of certain subject-matter teachers. The experience of the teacher proved to be non-significant.

Gronlund (1950) found that there are differences in teachers' accuracy in judging how well students are accepted by their classmates. No relationships could be established, however, between accuracy of teacher judgments and the following variables: The teacher's age, extent of teaching experience, length of time in present position, semester hours of college training, recency of college training, size of class, marital status, and the extent of teacher contact with the class.

Mendell (1968) found that teachers disagree as to the degree of seriousness of student misbehavior. Females chose heavier penalties for students than males, older faculty chose heavier penalties than younger, and teachers of the non-college-bound would have given more severe punishment than teachers of the college-bound.

Brown (1966) investigated the teacher role expectations as a function of teacher characteristics. His findings show that differences in role expectations were attributable to the teacher's age, sex, and teaching field. Science and math teachers perceived an

advice-information giver role as being significantly more important than did social studies teachers. The teacher's age and sex were found to influence his perception of his role as motivator. Similarly the relative strictness of control in the classroom was significantly related to the teacher's sex, teaching experience and teaching field.

Summary

The press upon students in the school environment to a large extent stems from their teachers. Through their demands, reinforcements and punishments of student behavior, teachers create an element of force which is perceived by students. The discussion in this part was undertaken to point out that teacher behavior is not the same toward all groups of students but depends upon the characteristics of teachers as well as of their students. Differential treatment of students based upon their sex, achievement level, and social class does exist. Teacher behavior has been related to such factors as their sex, marital status, experience, subject area taught, and variety of other characteristics.

The evidence suggests that teachers are partially responsible for differences in press as perceived by students.

Section III
Environmental Studies

Since technique for measuring environmental press is relatively a newly developed tool, a limited number of studies have been conducted in this area. However, those that have been done demonstrate the technique's usefulness in identifying factors in the environment which affect human behavior.

The following section is divided into three parts. The first concerns environmental studies done in the college setting, and a second reviews those conducted in secondary schools. The third part examines the one investigation which compared faculty and student perceptions of the environment. The latter, however, was conducted at the university level.

College Studies

An instrument for quantifying environmental press is the College and University Environment Scale, (CUES). The CUES contains five scales: practicality, community, awareness, propriety, and scholarship. Duling (1969), using the CUES, demonstrated that various college groups perceive the press of the university climate differently. He found that males differed from females on the "community" and the "propriety" scales. Single and married students differed on the "awareness," "propriety," and "scholarship" scales. Students who

were members of fraternities likewise felt press differently as measured by the "awareness" and "propriety" scales. Duling concluded that university students differ in their perceptions of environmental press. These differences are a function of their group membership.

Gelso and Sims (1968) sought to determine whether student commuters perceived the junior college differently than students living on campus. Faculty members also participated in the study. The results showed that, even though all three groups placed the five CUES scales in the same relative order, certain differences were apparent. Conclusions pointed out that

> A person's location and position in an institution significantly affects his perceptions of the characteristics of that institution. Since it is generally accepted that a person's perception of his environment affects his behavior in that environment, it seems evident that student personnel practitioners should seriously consider the location and positions of the various segments of the college population while attempting to develop and implement programs and policies (1968, p. 43).

Campbell (1964) hypothesized that junior college students perceive institutional press differently than university students in their respective environments. Differences were found on all 11 College Characteristics Index (CCI) factors between the two college groups. However, these findings may be interpreted as differences between two separate institutional environments rather than differences between junior college and university students. Moreover the composition of

both populations may have been different.

Baker (1966) investigated the perception of environmental press as it relates to students' residential status. The CCI was administered to three student groups: those living in dormitories, those living in boarding homes, and those living at home. Differences were found on five CCI factors between dormitory and boarding residents, and on eight factors in comparing students living at home with those in dormitories. Baker concluded that residence accounts for differences in the perception of the college environment.

Some research findings point to the relationship between college and university press and the subsequent achievement of its students. In one investigation Thistlethwaite (1959) analyzed the role of environmental press in pressuring students on to graduate school.

The CCI was administered to students on 36 campuses throughout the country to determine environmental press. A student aptitude index was constructed which reflected the average aptitude of all freshman at each of the participating institutions. The number of alumni from each institution, who later earned doctorates, was determined. By comparing environmental press to the aptitude level in each university, he could determine the role of press in motivating students to graduate school.

The results were striking. Thistlethwaite found that colleges differ significantly in the press they place upon their students.

Moreover, college press was consistent with expectations; Harvard and Radcliff manifested a high degree of press toward humanism, MIT was highest on scientism, and the University of Chicago highest on understanding, etc. Accordingly, it was found that alumni from these universities were more likely to go on to earn doctorates in these respective areas. The conclusion was that the university and college environment is an important determinant of student motivation to seek advanced degrees.

Thistlethwaite (1962) conducted a longitudinal study of 2,405 undergraduate men. He found that men who reported that their teachers

> . . . exerted strong press for enthusiasm, humanism, affiliation, independence, achievement, and supportiveness; or who exerted weak press for compliance, tend to raise their aspirations for advanced training more than men not reporting such press (1962, p. 313).

According to Thistlethwaite these findings supported the conclusions of the earlier study, that environmental press is partially responsible for scholastic achievement.

High School Studies

The High School Characteristic Index (HSCI), developed by Stern in 1960, is the counterpart of the CCI. Because of its recent construction, the HSCI has been used infrequently. In the studies that have been done using this instrument, however, it has been shown

to be quite useful for the examination of the school environment.

In pioneer research with the HSCI, Winfrey (1963) sought to determine whether different psychological climates exist among schools, and whether students within particular schools perceive press differently. The HSCI was administered to seniors at a number of Minneapolis area high schools. Significant differences were found between the individual schools on all six press clusters isolated by Winfrey. The six clusters included objective-intellectual; cultural-liberal, defensive-regulated, spirit-achievement, scientific-serious, and hostile-aggressive.

Specifically differences were found among schools on all six clusters with respect to sex, on five of the six with respect to aptitude, on three with respect to future plans, and achievement level. Within particular schools, significant differences were found on every cluster for all the variables tested. The variables examined included the students' sex, scholastic achievement, scholastic aptitude, fathers' educational level, and future plans. Winfrey concluded that differences in institutional press were present, as perceived by students among schools and between various student groups within these schools.

An extensive investigation by Herr (1965) examined the relationship of environmental press to a number of student characteristics. In the study, 725 students were administered the HSCI. These

students were placed in various groups according to grade point average, participation in extra-curricular activities, intelligence quotient, sex, fathers' occupation, and parochial or public school background.

The results of the study showed that press was perceived differently by students, depending upon the characteristics under consideration. Some examples of the differences are as follows: low achievers perceived more press for self depreciation and self de-evaluation; girls perceived more press for emotionality, narcissism, and sexuality; and boys more for play and for aggression. Students with a high level of intelligence (110+) perceived more press in intellectual areas. The higher the occupational status of the father the lower the press for abasement. Parents' educational level was associated with students' press for sexuality or prudishness. The conclusion was that these factors were probably the result of encouragement stemming from people in the environment.

A study, similar to Herr's, was done in a midwestern high school. The student characteristics it examined were sex, residence, religion, socio-economic status, intelligence, broken homes, and school-related activities. Results revealed differences, with respect to sex and residence, on eight of the HSCI factors. Specifically, differences were found on "abasement," "conjunctivity," "counteraction," "deference," "emotionality," "narcissism," "objectivity,"

and "impulsiveness" (Cauldhill, 1966).

There is some evidence that environmental press is related to the truancy and dropout rate in educational institutions. The question was posed whether students with high truancy records perceive the school environment any differently than those students with regular attendance records. Twenty-seven boys were identified as potential dropouts on the basis of their absenteeism, i.e. absent more than 22 percent of the days for which school was in session. A control group of 27 boys was selected who were matched on socio-economic background and mental ability, but differed on the attendance variable. That is the controls were absent only one percent of the school days. The results conclusively showed the two groups differed on four of the HSCI press scales; "achievement," "science," "sex," and "conjunctivity." A chi-square analysis was applied to the 10 items within each of the four scales for which significant differences were found. In this analysis the truant group perceived more press for grades, for possession of college aspiration, for being forced to work hard, a higher press for achievement, and they perceived teachers as having the classes and activities structured and planned. It was suggested that because the faculty members are the prime vehicle for translating institutional objectives into action, they need to be continually aware of how their actions and attitudes affect students and are interpreted by students (Herr, Hanson, 1966).

A second study approached the dropout problem as a function of the organizational climate of the school. Staff numbering 583 in 11 high schools responded to the Organization Climate Description Questionnaire (OCDQ) which was used to determine the organizational climate of the schools. Biographical information was obtained on 309 dropouts in these schools. The OCDQ has four scales which measure the relative openness or closeness of the school organizational climate. Openness on the OCDQ is characterized by the degree of exhibited production, thrust, consideration, and aloofness, whereas closeness is typified by the extent of exhibited disengagement, hinderance, esprit, and intimacy. The findings illustrated that, as the school's organizational climate approached the closed climate, the dropout rate increased. Average staff age, experience, and size of school decreased as the organizational climate moved toward the open climate. Finally, at the schools with a closed climate, the average age of staff was greater, teachers were more experienced, and the schools were larger and contained more students (Bushinger, 1966).

Kasper, Munger, and Meyers (1965) investigated the hypothesis that schools with guidance programs would have climates somewhat different than schools without counselors. The HSCI was administered to selected students in five guidance and five non-guidance schools. The results registered differences on eight HSCI scales. Guidance schools were noted to be characterized by a higher level of

individualness and initiative. Non-guidance schools displayed more group centeredness and a greater conformity to authority.

Barclay (1967) attempted to show that teachers are responsible for the press experienced by students. He asked secondary teachers in 11 curriculum areas to nominate students who most and least conformed to their notion of ideal students. Comparisons between high and low rated students were made on 80 intellectual, personality, motivational, and vocational variables. The results obtained were significantly different between high and low rated students, and between different curriculum areas. This was interpreted as indicating that press is generated to a large extent by teachers because of the expectations they may have of their students. For example, it was found that in math, science, and foreign language, press was greater for achievement, whereas in the art, business education, music, industrial arts, physical education and home economics areas, there was less emphasis on achievement and more on basic tools and behavior skills.

Just as students were shown to perceive the school climate differentially, so, too, various adult groups in the school see the environment in dissimilar ways. The OCDQ, described earlier, was administered to 33 principals and 1,034 teachers. The results showed that these two groups disagreed on three of the four climate dimensions derived. The respondents within given departments of the school

were compared and no differences were found. Since school departments see climate dimensions as being so much alike, it was reasoned that these dimensions must truly exist (Sargent, 1966).

Faculty and Student Perception of Press

Weiss (1964) compared faculty and student perceptions of the university environment. The entire student population of 3,054 and all 291 faculty members of St. Louis University responded to the CCI. An analysis of variance of the 11 CCI factors revealed differences on all factors for five undergraduate divisions. Students differed from faculty on nine of the 11 factors, with the faculty scores almost always being higher than those of students. Differences were found on most factors with respect to sex, and year in college.

Summary

A number of environmental press studies have been conducted, more frequently, however, on the college campus than in the high school. Most of these studies have resulted in significant findings since it has been demonstrated repeatedly that various subgroups of students perceive the press of an institution differently. College students experience differential press in relation to their sex, residential status, marital status, type of college attended, and achievement level.

Environmental studies in the high school have shown that press as perceived by students is affected by their sex, aptitude, achievement level, parents' educational level, age, grade in school, and the socio-economic background of their families. Scant evidence exists which suggests truants and dropouts may perceive the school somewhat differently than other students.

Administrators and teachers too have been shown to hold different views of the school. Only one study, however, has compared the faculty's and students' perception of the environment, this being done in a university setting. The study indicated that faculty see the university in an entirely different light than do its' students. These findings would seem to suggest that in secondary schools a similar disparity exists between the perceptions of teachers and students, with respect to the educational climate.

CHAPTER III

CONCEPTUAL FRAMEWORK

The conceptual scheme delineated in this chapter provides the framework on which the present research is based. It has generated the study's three hypotheses.

This framework is one developed by Pace (1958) and Stern et al. to account for behavior in various institutional environments. Contributions were also made by Combs and Snygg (1959) and Herr (1965a).

The following concepts will be discussed: field, environmental press, explicit and implicit goals, goal reinforcement, and differential goal reinforcement.

The Field Concept

Phenomenological psychology uses the concept of field for assisting in explaining human behavior. Behavior is a function of complexly interrelated forces which emanate from an individual's psychological and/or physical environment. These interrelationships are so complex they may not be clearly understood by observers. Therefore seemingly unrelated behavior forces become more manageable for scientists when their inter-relatedness are explained on the basis of the "field" construct. Combs and Snygg point out

> Even when the precise nature of these relationships is not known, it may be possible to deal with them effectively through the use of such a concept as 'field.' . . . When something occurs at one point with no visible means by which the 'cause' can be related to 'effect' the scientist often says the two events are connected in a field (1959, p. 19).

The concept of field is, therefore, an inference construct, something which does not necessarily exist, but which is useful in scientific research since it provides a bridge between "cause and effect."

The Perceptual Field Concept

Phenomenological psychology has taken the concept of "field" and linked it to perception. Phenomenologists in referring to the perceptual field mean:

> The entire universe including himself as it is experienced by the individual at the instant of action (Emphasis by Combs and Snygg) (Combs, Snygg, p. 20).

Perceptual field is unique and peculiar to the individual. It includes the person's awareness of any past experiences, any present and future psychological and physical forces, during the moment of his behavior. The perception as to the meaning of all these elements in the perceptual field determines and gives direction to behavior. Combs and Snygg contend that

> All behavior, without exception, is completely determined by, and pertinent to, the perceptual field of the behaving organism (Emphasis by Combs and Snygg) (1959, p. 20).

This is the fundamental postulate of perceptual psychology.

Environmental Press

The idea of press is based on the notion of the perceptual field process. Stern et al. assume that behavior results from the interaction of the individual with his environment. The environment provides many kinds of stimuli which are constantly impinging upon the behaving organism. Some of the types of stimuli include people, institutions, situations, tasks, rewards, and punishments.

These immediate stimuli, emanating from the physical environment, have varying levels of significance for the individual. He responds to some and is seemingly unaware of others. According to these authors, insensitivity to certain environmental stimuli may be the result of receptor limitations. More significantly, lack of attention may occur because the individual is attending to other elements in the environment.

Nevertheless, certain aspects of the environment are more s alient in the individual's perceptual field than others. These stand out as figures against ground. The parts of the environment which are significant determinants of behavior, the figures, are referred to collectively as "press." Environmental press then evokes a behavioral response as a result of an individual having perceived certain stimuli in the immediate physical environment.

The Two Types of Press

In this conceptual scheme environmental press is sub-divided into two types, "alpha press" and "beta press."

Alpha Press

Alpha press is the environment that actually exists. It is the composite of all existing environmental elements; each of which has the potential to elicit behavioral responses from participating individuals. The existence of these elements in the environment can be inferred by a number of competent observers.

Moreover the properties of alpha press need not necessarily be limited to those elements which can be readily observed by everyone. They may exist at a low level of awareness. The only important criterion for identifying alpha press is the potential impact the elements in the environment may have upon individual behavior regardless of the individual's awareness of their presence or effects (Stern et al., 1956).

Pace put it another way when he says that "Alpha press is the environment as it is intended by its major participants" (1958, p. 75). In the school the major participants would be the administrators, teachers, and counselors. It is the environment as they say it is or want it to be.

Beta Press

Beta press consists of the perceived environmental elements. From all the existing elements in the environment, each of which is capable of affecting behavior, certain ones are perceived by participating individuals. These perceived stimuli, or beta press, directly affect individual behavior.

Beta press can also be sub-divided into two categories, "common beta press" and "individual beta press."

Common Beta Press. The common beta press consists of the most commonly perceived elements in the environment. Some environmental elements become so salient that almost everyone in a functional group perceives them. For example, teachers' demands for high scholarship may be so consistent and forceful that almost all students perceive these environmental stimuli. Stern et al. summarize this view succinctly:

> When a particular way of perceiving the environment is shared (Emphasis by Stern et al.) by members of a functional group, it is called common beta press (Emphasis by Stern et al.) and it usually affects some means by which the group maintains its orientation to reality (1956, p. 37).

Individual Beta Press. Beyond these shared perceptions, this conceptual framework recognizes another aspect of beta press that explains highly personal and individually unique environmental perceptions. Individual beta press is a function of a person's

idiosyncratic properties, and therefore must be distinguished from common beta press. Individual beta press is related to one's personal needs, values, attitudes, intelligence level, or such other personality characteristics. For example a student having a lower level of intelligence may perceive the environment as pressing toward achievement to a greater degree than other students with higher levels of intelligence. Stern et al. say that

> Individual beta press may also be more easily recognized in the 'aberrant' behavior of the subject than by the actual sharing of the percept with another observer (1956, p. 38).

The School and Its Goals

The present study is concerned with the examination of press in a secondary school environment.

All institutions have a purpose. Every school therefore has a formal or informal set of goals and objectives toward which it strives. These serve to guide the short and long range behavior of the school's participants. Goals and objectives give behavior direction. Pace says,

> An objective is an aim or end, a point to be reached. Consequently, objectives or goals imply movement and direction in behavior. Objectives then give direction to change in behavior. Behavior can become and remain goal directed only as it is organized in reference to a goal (1958, p. 71).

It is possible to sub-divide goals into two categories, the

"explicit goals" and the "implicit goals."

Explicit Goals

Explicit goals consist of formally written statements as to what are the purposes and objectives of the educational institution. Frequently these may be written in faculty or student handbooks, school board policies, etc. When such written statements are absent, goals and objectives can be inferred by questioning key school personnel. Explicit goals are what the school's major participants, i.e. teachers and administrators, say they are or intend them to be.

Explicit goals correspond to alpha press. It has been pointed out above that alpha press consists of all environmental elements having the potential for stimulating behavior. The formally written or informally stated goals certainly meet this criterion, since as part of the intended environment, they have the potential to evoke behavior from the participants. Explicit goals are therefore part of the school environment's alpha press.

These explicitly stated goals, however, may or may not represent the actual behavior of the participants. Teachers may give lip service to these objectives and behave in a contrary fashion.

Implicit Goals

The actual behavior of an institution's major participants implies another set of goals. These are the implicit goals of the school. Since behavior is goal directed, the daily behavior of administrators and teachers represents the actual goals of the school. These implied goals may or may not reflect the explicit goals as formally stated in school policy. Furthermore implied objectives need not necessarily be given overt recognition or conscious verbalization. It is sufficient that they are reflected in behavior.

Implicit goals correspond to common beta press. It has been said that actions speak louder than words. Students who come in daily contact with faculty should then perceive the teacher's behavior more readily than some formally written or verbally stated explicit objectives. Since beta press was earlier defined as the environmental elements which are perceived, it becomes apparent that implicit goals are part of beta press.

Stern et al. summarize this view.

> The genuine demands which confront participants in the situation are reflected in the actual process. The type of tasks in which the students must engage, the typical relationships which prevail between faculty and students, the behavior trends which are consistently permitted or encouraged, define the true purposes far more clearly than the overt verbalizations concerning programmatic objectives, which may or may not be translated into relative activities (1956, p. 39-40).

Discrepancies Between Goals

Stern et al. believe that explicit and implicit goals must reinforce and be congruent with each other. The objectives perceived by the students should be in harmony with the goals as verbally or otherwise explicitly stated by the school. They say that

> Implicit press and explicit objectives should reinforce one another; for an institution should operate in reality the way it means to operate in theory. Consequently a serious lack of congruence between implicit press and explicit objectives would suggest to the faculty members and administrators that certain aspects of the environment ought to be changed in order to make the total input of the institution more consistent and effective (1956, p. 40).

However, Stern et al. believe that their experiences in educational institutions have suggested that implicit and explicit objectives are frequently not in agreement with each other. They contend that often the educational environments which explicitly manifest press toward uniqueness, creativity, and originality, in fact implicitly press toward conformity and dependency on the part of the student. These authors state that

> No verbal insistence on the development of independent thinking, for example, can alter the outcome of a scholastic program which emphasizes fixed and doctrinaire standards of judgement and early apprenticeship to the faculty concerned with molding students to orthodox patterns (1956, p. 41).

Another view contends that the explicit and implicit objectives, even though they may not be discrepant with each other, may be

perceived by students as being so. Explicit goals, which are usually long range and rather complex, can only be achieved through immediate more simple objectives. These immediate or implicit goals determine the students' perception of what the teacher wants. The students may not see as clearly as the teacher does the relationship of immediate behavior toward the accomplishment of long range goals. The difficulty may therefore lie not in the actual conflict of the two sets of objectives, but in the failure of the students to properly relate them (Pace, 1958).

In summary Pace says that

> Long range goals and the relationship of day to day activity of these goals may be obvious to teachers. However, the relationship is less likely to be seen by students unless long range goals are explicitly stated and kept before the students as using a thread upon which to string beads each day (1958, p. 76).

Rewards and Punishments

In order to continue as members the participants of an institution are forced to comply with most of its goals. The methods which are consciously or unconsciously employed to force or "press" for compliance to these objectives may be conceptualized as rewards and punishments.

The rewards and punishments which define press for conformity to institutional demands may be quite subtle and may not be explicitly

codified. Nevertheless they are present in various forms. In the school rewards may include such behavior as group approval, prestige and status, academic grades, allowances of privileges, friendliness, pleasant gestures such as smiles, etc. Punishment would include the opposite kinds of behavior by the school's major participants.

Differential Press

Herr (1965a) has postulated the idea of differential press. It has been previously pointed out that common beta press consists of the shared perceptions of certain environmental elements by a functional group. However rather than considering all students as a single group, Herr reasons that individuals possessing different characteristics should experience and therefore perceive environmental press differently.

Teachers and administrators are committed to explicit or implicit goals. Students who conform to those objectives are rewarded, while those who deviate are punished. It seems apparent that some student groups comply with these goals more readily than others, and are rewarded accordingly. The salient environmental elements perceived by each group, therefore, would likely be different.

In essence, differential press means that not everyone is given

the same kind of encouragement, the same rewards or the same opportunities. This differential treatment may be a function of student sex, socio-economic background, intelligence level, motivational level, values and attitudes, educational plans, etc. (Herr, 1965a).

Summary

The environment consists of numerous stimuli, all of which can potentially affect behavior. Certain of these stimuli are perceived by individuals thereby affecting their behavior. These stimuli are referred to as environmental press.

Press in the school may be perceived differently by teachers and students. Teachers, who generate press, may explicitly intend press which differs from the implicit press they manifest in their behavior. Implicit press is more salient and therefore more likely to be perceived by students.

CHAPTER IV

METHODOLOGY

This chapter explains the methods used in the study. It is composed of five sections. The first section covers the hypotheses of the study. The second presents a brief profile of Capitol City High School, the institution wherein the study was conducted. The third discusses the instrument, its theoretical shortcomings and its validity and reliability. In the fourth, the procedure followed in the investigation is delineated. The last section covers the methods and statistical techniques which were employed in analyzing the data.

The Hypotheses

The present study was designed to investigate three hypotheses. The hypotheses were derived from the conceptual framework delineated in the previous chapter. The hypotheses generated in the theory indicate that certain differences exist between the explicit objectives as perceived by teachers in the school, and the implicit goals perceived by students.

The hypotheses to be tested in the study are:

1. Secondary school teachers perceive the institution's explicit objectives differently than secondary school students perceive the institution's implicit press, as measured by the Stern High School

Characteristics Index.

2. Different groups of secondary school teachers perceive the institution's explicit objectives differently, as measured by the High School Characteristics Index. These differing perceptions are a function of the teacher's age, sex, experience in the school, academic preparation, and marital status.

3. Different groups of secondary school students perceive the implicit press of the school environment differently, as measured by the High School Characteristics Index. These differing perceptions are a function of the student's grade level, sex, grade average, educational plans, and the educational level of the student's parents.

These three hypotheses were statistically tested in the null form.

Capitol City High School

The criteria which were followed in choosing a school for participation in this study were: 1) the institution had to be large enough to provide an acceptable number of faculty who could take part in the study; and 2) it must have had an administration which was willing to lend its support and cooperation to the investigation.

The secondary school selected which met these criteria is located in a city of approximately 70,000 in the Pacific Northwest. The city is characterized by a middle class, suburban, type of atmosphere. Capitol City High was initially operated as a combined junior and senior

high. In the 1968-69 academic year the school restricted its enrollment to the three upper levels.

The physical facilities are new and were built in 1965 utilizing a two floor plan. The building covers an area equal to approximately five and one third acres of floor space. The two levels contain 79 classrooms, one large and three smaller gymnasiums, a large cafeteria, a theater, and a library housing 17,000 volumes.

The school is attended by approximately 1,850 students. There are about 650 each in the sophomore and junior classes, and 550 in the current senior class.

Little information was available as to the type of students who attend Capitol City Senior High, with respect to such factors as family background, intelligence level, etc. However, 62 percent of the graduating class of the previous school year intended to go on to college, eight percent wanted to further their education in vocational schools, and 27 percent stated other goals such as employment, military service, or marriage. During the course of the previous academic year three percent of the senior class students dropped out of school. Most of these, however, transferred to other areas.

The high school's faculty numbers 86. Of these 47 are females and 39 are males. Their ages are mixed with both the young and more experienced groups of teachers being about equally represented. The administration is made up of a principal, two assistants, a dean of boys

and a dean of girls. There are four full-time and two part-time counselors. This is a ratio of one counselor to each 370 students.

The curriculum of the school strongly emphasized academic over non-academic subjects. This is evident in the language department, which offers sixth-year language courses in German, French, Latin, and Spanish. The remainder of the curriculum is composed of the traditional subjects given in most high schools in the United States. These are English, social studies, science, mathematics, business, home economics, industrial arts, music, art, and physical education.

The Instrument

The instrument used in the study was the High School Characteristics Index (HSCI). It was developed by George G. Stern at Syracuse University. The HSCI consists of 300 items distributed among 30 scales of 10 items each. These items are intended to correspond to the environmental press conditions that are likely to facilitate or impede the students' expression of those conditions. The magnitude of the environmental press is inferred from responses about the school environment to the 10 statements on each scale. The respondent simply indicates "true" or "false" to each statement concerning the press of the school environment as he views it. For example, "teachers are very interested in student ideas or opinions about school affairs," or "teachers often make you feel like a child," are statements

of the "Abasement - Assurance" scale, which consists of 10 such items. A "true" response to the former statement indicates "assurance," whereas a "true" on the latter points toward "abasement." A score of 10 signifies the respondent perceives maximum abasement in the environment, and a score of 0 indicates a perception of maximum assurance.

The 30 scales of the HSCI are as follows:

1. Abasement vs. Assurance - Self depreciation and devaluation as reflected in the ready acknowledgement to inadequacy, ineptitude, or inferiority, acceptance of humiliation, and other forms of self-degradation vs. self-confidence.

2. Achievement - Surmounting obstacles and attaining a successful conclusion in order to prove worth, to rival and surpass others.

3. Adaptability vs. Defensiveness - Accepting criticism or advice publicly vs. resistance and concealment, or justification, or failure and humiliation.

4. Affiliation vs. Rejection - Close friendly, reciprocal associations with others vs. disassociation from others, withholding friendship and support.

5. Aggression vs. Blame Avoidance - Indifference or disregard for feelings of others as manifested in overt, covert, direct or indirect aggression vs. the denial or inhibition of such impulses.

6. Change vs. Sameness - Variable or flexible behavior vs.

inflexible behavior or repetition.

7. Conjunctivity vs. Disjunctivity - Organized, purposeful planned activity vs. uncoordinated, diffuse, or self-indulgent behavior.

8. Counteraction vs. Inferiority Avoidance - Persistent striving to overcome difficult frustrating, humiliating or embarrassing experience and failures vs. avoidance, withdrawal or protective measures in situations which might result in such outcomes.

9. Deference vs. Restiveness - Submission to the opinion and preferences of others perceived as superior vs. rebelliousness.

10. Dominance vs. Tolerance - Ascendancy over others by means of assertive or manipulative control vs. forbearance.

11. Ego Achievement - Self-dramatizing, idealistic social action; active or fantasied achievement-oriented in terms of dominance or influence.

12. Emotionality vs. Placidity - Intense, open emotional display vs. calm serene or restricted responses.

13. Energy vs. Passivity - Intense sustained vigorous effort vs. sluggish inertia.

14. Exhibitionism vs. Inferiority Avoidance - Self-display and attention seeking vs. avoidance, withdrawal or protective measures in situations which might result in attention from others.

15. Fantasied Achievement - Daydreams of success in achieving extraordinary public recognition, narcissistic aspirations for

personal distinction and power.

16. Harm Avoidance vs. Risktaking Avoidance - Withdrawal or protective measures in situations which might result in physical pain, injury, illness or death, vs. indifference to danger challenging or provocative disregard for personal safety; thrill seeking.

17. Humanism - The symbolic manipulation of social objects or artifacts through empirical analysis reflection, discussion and criticism.

18. Impulsiveness vs. Deliberation - Impulsive, spontaneous or impetuous behavior vs. careful, cautious, considered reflectiveness.

19. Narcissism - Preoccupation with self; erotic feelings of association with one's own body or personality, vanity.

20. Nurturance vs. Rejection - Supporting others by providing love, assistance, or protection, vs. disassociation from others, withholding support and friendship.

21. Objectivity vs. Projectivity - Detached, non-magical unprejudiced, impersonal thinking, vs. superstitious, autistic, irrational, paranoid, or otherwise egocentric perceptions and beliefs.

22. Order vs. Disorder - Compulsive organizations of the immediate physical environment, manifested in preoccupation with neatness, orderliness, arrangement, and meticulous attention to detail, vs. carelessness.

23. Play vs. Work - Pursuit of amusement and entertainment

vs. persistently purposeful, serious, task-oriented behavior.

24. Practicalness vs. Impracticalness - Useful tangibly productive, non-theoretical application of skill or experience in manual arts, social affairs, or commercial activities vs. indifference.

25. Reflectiveness - Intraceptive activities, introspective preoccupation with private psychological, spiritual esthetics, or meta physical experience.

26. Scientism - The symbolic manipulation of physical objects through empirical analysis, reflection, discussion and criticism.

27. Sentience vs. Puritanism - Indulgent, voluptuous sensory stimulation and gratification vs. austere conduct.

28. Sexuality vs. Prudishness - Erotic heterosexual interest or activity vs. the denial or inhibition of such impulses.

29. Succorance vs. Supplication - Autonomy - Dependence on others for love, assistance and protection vs. detachment, independence, self-reliance.

30. Understanding - Detached intellectualization, problem solving, analysis, theorizing or abstraction, as ends in themselves.

A Theoretical Question

It has already been pointed out that Stern conceptualizes the individual's perception of the environment as being influenced by two factors, the common beta press and the individual beta press. It will

be recalled that Stern et al. define common beta press as the subjective perception on the part of an individual of those elements in the environment which are so salient and obvious that they can be perceived by any member of a functional group. Consequently these perceptions are shared by everyone in the group. The individual beta press was explained as the press of the environment as it is perceived by any one individual. It is affected by the individual's particular personality characteristics or idiosyncratic needs. Both parts of beta press, according to Stern et al., operate more or less independently of each other. The former exists so obviously that everyone in the group can perceive it. The latter is less apparent because it is only percevied by those individuals whose unique needs are affected by corresponding elements in the environment.

Stern has constructed three instruments which purport to measure the common beta and individual beta presses independently. The High School Characteristics Index (HSCI), and College Characteristics Index (CCI) are intended to measure the former and the Activities Index (AI) is intended to measure the latter. All three indices parallel each other. The HSCI and CCI have 30 scales and 11 factors which correspond to the AI's scales and factors. Stern says

> The Activities Index scales parallel those of the Environmental Indexes, those of the former corresponding to behavioral manifestations of personality needs and those of the latter to environmental conditions likely to facilitate or impede their expression (Manual, 1963, p. 1).

If Stern's contention is valid, that personality needs do not affect the common perceptions of the environment as measured by the HSCI and CCI, then the correlation between the corresponding scales of these two tests and the AI should be low or tending toward $r = .00$.

McFee (1961) sought to determine whether the CCI reflects environmental press or the needs of the individual. She tested Stern's hypothesis that the two beta presses are independent of each other. The two hypotheses tested by McFee were:

> The more easily verifiable the behavior of knowledge the item describes, the less likely it is that people will see it in an individual way; and secondly that the student has a basis for saying that the item is true or false (1961, p. 25).

McFee's method was to administer and correlate the CCI and AI responses of 100 Syracuse University Freshman. She found that the correlations between comparable scales of the AI and CCI reflected levels from $r = -.007$ to $r = +.057$, with a median of $r = +.006$. A coefficient of $r = .197$ would have been significant at the .05 confidence level. She concluded that the responses to CCI items were independent of parallel personality needs of the respondent.

Kight and Hanson (1967) conducted a study similar to McFee's. They investigated the AI's relationship to the HSCI. The hypothesis was identical in that it dealt with the correspondence of student needs to the perception of environmental press. In this study 125 students in grades 9 to 12 were tested and their responses compared on

corresponding scales of the HSCI and AI.

Kight and Hanson's findings are in conflict with McFee's. They obtained correlations at the .01 level of significance on 9 of the AI-HSCI scales; and at the .05 level on 2 of the 30 corresponding scales. These investigators concluded that in studies of high school environments using the HSCI, it cannot be assumed that students' responses are free from their individual needs. Moreover the significant relationships which were noted between certain needs and environmental scales may reflect a condition of unmet needs on the respondent's part. Kight and Hanson point out that though perceptions of environmental press are not entirely free of personal needs, the value of the environmental index is not totally negated.

In another related study, Mitchell (1968) administered the California Psychological Inventory, the SRA Youth Inventory, the Brown-Holtzman Survey of Study Habits and Attitudes, and the HSCI to 233 subjects. Mitchell found the following correlations between personality and the HSCI scales at the .05 level of confidence: 50 percent of the students on 9 of the 30 HSCI scales; 25 percent of the students on 21 HSCI scales; and 11 percent of the students on 25 HSCI scales. Since HSCI scales correlated significantly with various personality scales of other instruments, Mitchell concluded that

> Considerable suspicion is cast on a student's ability to be objective without personality bias in evaluating the objectivity of his environment or any of the numerous

> press included in the HSCI. . . . the extent to which the subject attributes abasement and aggressive tendencies to his school environment is also related to many personality variables. This suggests that some form of projections may be operative here which further may disqualify many subjects from many of the objective judgements of these particular press (1968, p. 54).

Summary

The reviewed studies suggested that individual beta press influences common beta press. The idiosyncratic elements in a personality appear to be partially responsible for perception of environmental press. Nevertheless, the value of the HSCI as an instrument is not diminished. It is useful to understand the perceptions of environmental press by various students in light of their needs rather than aside from them, or just as a fact, regardless of the source.

HSCI Reliability and Validity

Information concerning the HSCI's validity and reliability is sparse. The HSCI manual does not include any validity-reliability data, presumably because the HSCI is a relatively new instrument.

Cauldhill (1966) reports that Stern advised her to

> . . . derive validity and reliability from the CCI and to infer reliability for the HSCI from the CCI prior to publication of a new manual. Content validity was inferred from the examination of the CCI-HSCI items. Concurrent validity was inferred from a consideration of item similarities in the HSCI-CCI (1966, p. 56).

Test-retest data for determining HSCI reliability are also not available. Furthermore, reliability cannot be derived by an estimate of one administration through the split-half technique because, as Pace and Stern point out

> This method may not be appropriate for an instrument on which one hopes to find a skewed distribution and minimal dispersion of scores (1958, p. 72).

Lacking pertinent data, it is necessary to infer HSCI reliability from the CCI. Relevant reliability data were obtained from a study conducted by Pace and Stern (1958) of 423 students and faculty at five different colleges. An item analysis of each of the 30 CCI scales was made separately for each of the five institutions. This procedure yielded a total of 1,500 discrimination indices. These indices revealed that 81 percent of the items had moderate to high discriminating power, i.e. correlated at $r = .40$ or higher with the scale from which they were chosen.

There is also little available validity data for the HSCI. However, Pace and Stern believe that since different results were obtained for each of the five college environments in the above-mentioned study, that these were in fact different types of environments. Therefore the test is capable of differentiation between unlike school climates which qualified observers would also expect to be different. Such evidence suggests validity.

Raimy (1964) investigated the HSCI validity-reliability problem.

He initially administered the HSCI to 500 junior high students. Their responses were analyzed so that 20 clusters were extracted from the 300 items. Six of these clusters were found to account for 196 items, all of which had adequate reliability.

The HSCI was then given to 50 students in each of four different types of high schools. Their responses were scored using the six-cluster based keys and the differences tested among schools. Raimy found that the six clusters had a reliability of .60. Raimy said that

> The measuring scales derived from these clusters do yield statistically significant levels when used to measure the environmental press of high schools pre-judged to be manifestly different. Although the validity of the scales must be further investigated, the measure appears to have potential utility both as independent variables in investigations of the effect of environmental press on instructional objectives, and dependent variables in investigations of the effect of social, political and economic press on high school characteristics (1964, p. 119).

Procedure

Data Collection

This study was conducted in Capitol City High School, in January, 1970. All 86 teachers in this school were given the HSCI, an answer sheet, and a teacher questionnaire. Attached to these materials was a cover sheet explaining the study and its intended purpose and objective. Each packet was numbered so that any teacher who failed to

return the materials could be identified and reminded to do so.

In the cover letter teachers were informed that all their responses would be confidential and available only to the investigator. Teachers were also told that the study's results would be discussed with them at a future faculty meeting and that a final copy of this dissertation would be given to the school for their examination.

The teacher questionnaire sought information relative to the teachers' sex, marital status, age, college preparation, and the number of years they had been teaching in the present school. The teacher questionnaire appears in Appendix A.

Teachers were asked to respond to the HSCI items as accurately, honestly, and frankly as possible. The present study is based on the assumption that teacher responses to the HSCI represent their perceptions of Capitol City High School's explicit objectives.

Three days after the teachers had received the HSCI packet, any who had not returned it were personally contacted during their free hours and encouraged by the investigator to cooperate in the study. Two days later a third contact was made through a letter further urging teacher participation.

Teachers were tested prior to the testing of students. In this way they would not have any opportunity to gain knowledge concerning the manner in which students responded to HSCI items. The reverse problem was assumed to be minimal since there were fewer teachers, and

teachers would be less likely to discuss the study with their colleagues in the presence of students.

Two hundred seventy students, 90 from each of the three classes were randomly selected as participants for the study. This represented 15 percent of the Capitol City High student population. Randomness was achieved by assigning each student a consecutive number on class lists, beginning with one to the number of students in a particular class. A table of random numbers was used to draw the names of 90 students from each of the three classes. Because a number of students had dropped or transferred out of Capitol City High it was necessary to return to the list of students and table of random numbers to replace those that had been drawn earlier and were no longer present in the school.

Students were located and tested in groups of 90, according to their respective classes. Prior to the beginning of the first class period on each test day, lists containing the names of participating students were distributed to classroom teachers. These lists instructed teachers to release the specified students for testing. Each teacher received only the names of those students in her classroom. This procedure was followed on each of the test days.

The juniors were tested on the first morning, the seniors on the second, and the sophomores on the last. The afternoons were utilized for testing any students who did not report to the morning session.

The procedures followed in the afternoons were identical to those of the morning. All selected participants were located and tested in this manner in three morning sessions and three afternoon makeup sessions.

The students were tested in the school cafeteria. As they entered the cafeteria students were seated in such a manner that they would be comfortable and could not disturb others seated on either side. The investigator explained the study, its purposes and objectives. The students were told that all the information they submitted would be treated in confidence. The only purpose for requesting their names on the materials was in the event they were not completed properly the student could be located later and the problem rectified. Students were advised that any who did not wish to participate need not do so and would be excused. Only two students chose to exempt themselves.

The HSCI, the HSCI answer sheet, and student questionnaire were then distributed. The examiner explained each item of the questionnaire as the students responded to it. The necessity of responding to all questions was emphasized. The questionnaire sought information relative to the students' sex, grade level, plans subsequent to high school graduation, the educational level of the parents, and the student's academic grade average over the course of the past year. If anyone was not sure of the answers to any of these questions he was told to respond as best he could. The student questionnaire appears in Appendix A.

Upon completing the student questionnaire, the instructions appearing on the face of every HSCI test booklet were read aloud. The manner in which the answer sheet should be marked was explained. After the students had begun work the examiner and two proctors circulated around the room to ensure that students were using proper methods in completing the HSCI.

During the testing periods the cafeteria was quiet with little outside disturbance. The room was a comfortable, place in which to work. The students seemed to reflect this by their apparent interest in the study as they proceded.

When everyone was finished the students were thanked, the materials collected, and the students dismissed.

This study is based on the assumption that student responses to the HSCI items represent their perceptions of the implicit press of Capitol City High School.

Data Analysis

To test the first hypothesis the means of the composite scores for all teachers were compared with the means of the composite scores of all students on each of the 30 respective HSCI scales. A two-tailed "t" test was used in calculating the differences between the means.

The analyses of the second and third hypotheses presented a different type of problem. Since each of these hypotheses contained five

variables, an analysis of variance was used in order to evaluate the interaction effects. Analyses of variance were conducted separately for each of the 30 HSCI scales for every variable in the two hypotheses.

The .05 level of confidence was used as the criterion point of significance for all three hypotheses (McNemar, 1955).

Teacher groups generated by the variables in Hypothesis Two were: 1) age, (30 and over vs. less than 30); 2) sex; 3) marital status; 4) academic preparation (academic vs. non-academic); 5) experience in the present school (three years or more vs. less than three years).

Student groups generated by the variables in Hypothesis Three were: 1) grade level (sophomores vs. juniors vs. seniors); 2) sex; 3) academic achievement (A and B vs. C and D students); 4) educational plans (college bound vs. non-college bound); 5) parents' combined educational level (25 years or more vs. less than 25 years).

Summary

Three hypotheses were tested in the study: 1) that teachers perceive environmental press differently than students; 2) that press perceptions vary among groups of teachers; 3) that press perceptions vary among groups of students.

To test these hypotheses the High School Characteristics Index (HSCI) was administered to 270 randomly selected students and all

86 teachers in a secondary school. Group means of teachers and students were compared on each of the 30 HSCI scales. Similarly, the means of teachers' groups were compared, and the means of students' groups were compared.

CHAPTER V

THE FINDINGS OF THE STUDY

This chapter will present the significant findings of the study. Information relative to each of the three hypotheses will be given separately. Apparent differences which did not reach the .05 level of confidence appear in Appendix B.

Hypothesis One

Hypothesis One is:

"Secondary school teachers perceive the institution's explicit objectives differently than secondary school students perceive the institution's implicit press, as measured by the Stern High School Characteristics Index."

When the mean scale scores of teachers and students were compared, a number of significant 't' values were noted. Table 1 shows that teachers differ significantly from students on 17 HSCI scales. On one-third of the scales teachers and students differ with each other by more than one point.

Students perceived greater press in the direction of abasement, adaptability, disjunctivity, restiveness, rejection, projectivity, and less toward understanding than teachers. Moreover, students felt less environmental pressure toward tolerance, and more toward

Table 1. t-Values for the Significant Differences Between the Means of Teachers and Students.

Scales	Teachers (N = 82) $\bar{X}$	Students (N = 270) $\bar{X}$	t
Abasement-Assurance	2.94	4.65	-6.52
Adaptability-Defensiveness	3.46	4.62	-5.81
Change-Sameness	4.52	5.24	-3.48
Conjunctivity-Disjunctivity	7.34	6.11	4.88
Deference-Restiveness	5.40	4.64	3.90
Dominance-Tolerance	5.06	6.15	-4.35
Ego Achievement	5.79	5.20	2.29
Energy-Passivity	5.41	4.54	2.78
Harm Avoidance-Risktaking	4.39	3.35	6.18
Humanities, Social Science	4.93	3.69	4.01
Nurturance-Rejection	5.56	4.90	2.06
Objectivity-Projectivity	7.62	5.73	6.64
Reflectiveness	6.45	5.32	4.44
Science	6.37	5.12	4.64
Sensuality-Puritanism	5.68	4.87	3.96
Succorance-Supplication	6.44	4.36	7.82
Understanding	6.04	5.25	3.45

.05 > 1.96
.01 > 2.57
.001 > 3.29

d.f. = 350
N = 352

passivity, risktaking, and puritanism than teachers.

Teachers perceived the environment as being characterized by press toward science, humanities and social science, reflectiveness, and as lacking in change. Teachers also saw press toward ego achievement and succorance.

The results clearly indicate that gross differences are present in the perceptions of environmental press by teachers and students. On the basis of these findings the first and major hypothesis of this study is confirmed.

Hypothesis Two

Hypothesis Two is:

"Different groups of secondary school teachers perceive the institution's explicit objectives differently, as measured by the High School Characteristics Index. These differing perceptions are a function of the teacher's age, sex, experience, academic preparation, and marital status.

Sex

One of the teacher characteristics isolated for study was sex. The relevant data, presented in Table 2, indicate that differences exist in the way men and women teachers perceive the school environment. Significant differences were noted on eight of the 30 HSCI scales.

Table 2. F-Values for Significant Differences Between Teachers Compared on the Basis of Sex.

Scales	Males (N = 38) $\bar{X}$	Females (N = 44) $\bar{X}$	F
Achievement	6.47	5.43	6.10
Change-Sameness	5.10	4.02	9.93
Ego Achievement	6.34	5.31	5.51
Energy-Passivity	6.15	4.77	6.54
Fantasied Achievement	5.13	4.14	6.07
Impulsiveness-Deliberation	5.55	4.68	5.17
Science	6.89	5.90	4.29
Understanding	6.63	5.52	8.96

.05 > 3.97
.01 > 7.00

d.f.
Between Groups = 1
Within Groups = 80

Males perceived the environmental press as being characterized by higher degrees of achievement, change, energy, impulsiveness, science, and understanding. Men also expressed a perception of explicit press toward ego achievement and fantasied achievement.

Conversely, female teachers perceived the explicit objectives of the school as exerting press toward sameness, passivity, and deliberation. Women perceived less press than men toward science and understanding, fantasied achievement, ego achievement and achievement.

Age

The second teacher characteristic to be examined was age. Significant differences were obtained on seven HSCI scales between teachers 29 years of age or younger versus those over 29. These data are presented in Table 3.

Table 3. F-Values for Significant Differences Between Teachers Compared on the Basis of Age.

Scales	29 Yrs. & Younger (N = 33) $\bar{X}$	30 Yrs. & Older (N = 49) $\bar{X}$	F
Abasement-Assurance	3.60	2.48	6.64
Adaptability-Defensiveness	4.12	3.02	10.59
Counteraction-Inferiority Avoidance	5.15	6.18	5.50
Dominance-Tolerance	5.60	4.69	4.31
Energy-Passivity	4.72	5.87	4.24
Order-Disorder	6.30	5.36	10.76
Science	5.59	6.81	5.43

.05 > 3.97
.01 > 7.00

d.f.
Between Groups = 1
Within Groups = 80

Younger teachers perceived the explicit press as exerting pressure toward abasement, adaptability, passivity, and order. They saw less environmental press than their counterparts toward science. In addition, this group saw more press toward inferiority-avoidance

and dominance than did the older group of teachers.

Older teachers, those 30 years of age and above, perceived explicit press as being in the direction of assurance, defensiveness, counteraction, tolerance, energy, disorder, and science.

Academic Preparation

The third variable examined concerned teachers' academic preparation with respect to college major. Table 4 contains scale response comparisons on the basis of the teachers' academic preparation. It shows that significant differences were found on five HSCI scales.

Table 4. F-Values for Significant Differences Between Teachers Compared on the Basis of College Major.

Scales	Academic ($N = 50$) $\bar{X}$	Non Academic ($N = 32$) $\bar{X}$	F
Abasement-Assurance	3.36	2.28	6.10
Adaptability-Defensiveness	3.74	3.03	4.03
Change-Sameness	4.18	5.06	6.04
Ego Achievement	5.38	6.43	5.63
Energy-Passivity	4.78	6.40	8.86

.05 > 3.97
.01 > 7.00

d.f.
Between Groups = 1
Within Groups = 80

More specifically, teachers with majors in academic subjects perceived the environment as reflecting a press toward abasement and adaptability. They saw less press toward change, energy, and ego achievement than non-academic teachers.

Teachers who had majored in non-academic subjects perceived explicit press toward assurance, defensiveness, and ego achievement. They perceived less press than academic teachers toward sameness and passivity.

Other Variables

Two other variables were studied as part of Hypothesis Two. These compared teachers' perceptions of the explicit press with respect to the extent of teaching experience within the school, and also on the basis of a teacher's marital status.

In each of these comparisons significant differences were discovered for one of the 30 HSCI scales. This finding was not considered of any importance since at least this number of differences would be expected to occur merely by chance at the .05 level of confidence.

Summary

Summarizing the findings relative to the second hypothesis, it is apparent that teachers' perceptions of explicit press of the school

environment do vary with respect to sex, age and academic preparation. On the other hand, marital status and experience do not seem to contribute to such disparity. The second hypothesis is therefore accepted with reference to the three former variables.

Hypothesis Three

Hypothesis Three is:

"Different groups of secondary school students perceive the implicit press of the school environment differently, as measured by the High School Characteristics Index. These differing perceptions are a function of the student's grade level, sex, grade average, educational plans, and the educational level of the student's parents."

Grade Level

The results in Table 5 show that Capitol City High students perceive the implicit press of the environment differently depending upon the grade level they occupy. When various grade levels were compared, significant differences were found on eight scales.

Sophomores perceived a significantly greater amount of press than juniors and seniors on all eight scales. These include achievement, affiliation, change, emotionality, exhibitionism, impulsiveness, play, and science.

Juniors felt a press toward rejection, inferiority avoidance,

deliberation, and work. They perceived less press toward science than sophomores and seniors.

Table 5. F-Values for the Significant Differences Between Students Compared on the Basis of Grade Level.

Scales	Soph. ($N = 90$) $\bar{X}$	Juni. ($N = 90$) $\bar{X}$	Senior ($N = 90$) $\bar{X}$	F
Achievement	6.11	5.60	5.29	4.51
Affiliation-Rejection	6.59	5.79	6.09	3.74
Change-Sameness	5.69	5.14	4.90	5.56
Emotionality-Placidity	5.60	5.29	4.84	4.95
Exhibitionism-Infer. Avoidance	6.06	5.12	5.30	6.22
Impulsiveness-Deliberation	5.92	5.13	5.24	5.44
Play-Work	6.29	5.58	6.14	3.94
Science	5.56	4.64	5.16	5.57

$.05 > 2.99$
$.01 > 4.60$

d.f.
Between Groups = 2
Within Groups = 267

Seniors perceived the environment as exerting press toward placidity and sameness. They saw less press than the other two groups toward achievement.

Sex

The findings indicate that male and female students perceive environmental press differently. Table 6 shows that girls and boys

differed significantly on nine HSCI scales.

Table 6. F-Values for Significant Differences Between Students Compared on the Basis of Sex.

Scales	Males (N = 134) $\bar{X}$	Females (N = 136) $\bar{X}$	F
Abasement-Assurance	5.06	4.24	8.38
Emotionality-Placidity	4.94	5.54	9.40
Exhibitionism-Inferiority Avoidance	5.10	5.87	11.26
Narcissism	6.32	7.38	24.51
Nurturance-Rejection	4.52	5.26	5.82
Objectivity-Projectivity	5.24	6.19	8.13
Reflectiveness	4.78	5.85	22.10
Sensuality-Puritanism	4.58	5.13	5.64
Sexuality-Prudishness	6.52	6.97	4.30

.05 > 3.84
.01 > 6.64
.001 > 10.83

d.f.
Within Groups = 268
Between Groups = 1
N = 270

Males perceived press in the environment toward abasement, placidity, inferiority avoidance, rejection, and projectivity. Boys also saw pressure in the school for puritanism and prudishness.

Females on the other hand, perceived implicit press in the environment toward narcissism and reflectiveness. Girls saw the school climate as being characterized by assurance, emotionality and exhibitionism. They also saw pressure toward nurturance, objectivity,

sensuality, and sexuality in Capitol City High.

Academic Grades

A third variable studied related to the academic grades students believed they had achieved. Students who perceived themselves as being 'C' and 'D' achievers were compared to those who saw themselves as being 'A' and 'B' students. Significant differences were discovered between these groups on five HSCI scales. These results are shown in Table 7.

Table 7. F-Values for Significant Differences Between Students Compared on the Basis of Grades.

Scales	C & D (N = 85) $\bar{X}$	A & B (N = 185) $\bar{X}$	F
Abasement-Assurance	5.23	4.38	7.69
Adaptability-Defensiveness	5.01	4.44	7.55
Aggression-Blame Avoidance	3.08	2.56	4.26
Objectivity-Projectivity	4.91	6.09	10.87
Sexuality-Prudishness	7.11	6.57	5.40

.05 > 3.84
.01 > 6.64
.001 > 10.83

d.f.
Between Groups = 1
Within Groups = 268

Lower achievers perceived a greater negativeness in the environment than higher achievers. They saw press toward abasement, aggression, and projectivity. They also perceived the school

atmosphere as emphasizing sexuality and adaptability to a greater degree than the higher achievers.

'A' and 'B' students perceived the institutional climate as being typified by assurance, blame avoidance, and objectivity. They perceived the environment as pressing more toward prudishness and defensiveness than 'C' and 'D' students.

Post High School Educational Plans

Students were grouped according to their educational plans subsequent to high school graduation. The perceptions of students intending to go on to college were compared to those of students having other plans. The results obtained show that some differences between these two groups exist.

Differences between college-bound and non-college-bound students were found on three scales. These included "abasement-assurance," "aggression-blame-avoidance," and "sexuality-prudishness." The two former scales were significant at the .05 level, whereas the latter reached the .001 level of confidence.

Non-college-bound students saw the environment of the school as pressing toward abasement and aggression. This group also perceived pressure toward sexuality.

These findings do not appear convincing since significant differences are in evidence on but three HSCI scales. The differences

found on two of the 30 scales only slightly exceed their probable chance occurrence at the .05 level of confidence. The difference discovered on the scale at the .001 level is much more clearly not the result of chance.

Parental Educational Background

The last student variable examined relates to the parental educational background. Students whose parents had a combined educational level exceeding 24 years were compared to those whose parents had 24 or fewer years of formal schooling.

Significant differences were found on only two scales. These included "fantasied achievement" significant at the .05 level of confidence, and "sexuality-prudishness" significant at the .01 level of confidence. As pointed out with respect to the previous variable, this number might be expected to be obtained by chance and it therefore cannot be assumed to be a true difference.

Summary

The results pertinent to the third hypothesis show that various groups of students perceive environmental press differently. These differences are related to students' grade level, sex, and their conception of themselves relative to academic achievement. Evidence found would seem to imply that students' educational plans are also

related to the differential perception of the environment. With respect to these four variables the third hypothesis is accepted.

Parental educational levels were not found to affect student environmental perceptions to any great degree.

CHAPTER VI

A DISCUSSION OF THE FINDINGS

The present chapter discusses the results of the study. Even though a simple cause-effect relationship cannot be established with respect to environmental press, it is imperative to provide some explanation concerning the findings.

This chapter is divided into four sections. The first discusses general observations made during the study. The next three are concerned with the significant findings in relation to each of the three hypotheses.

General Observations

Teachers

Ninety-five percent of the teachers in the school participated in the study. They had mixed reactions to the investigation. Some teachers confronted the researcher with very constructive criticism and pointed out what they believed to be the shortcomings of the study. These teachers questioned the instrument's ability to validly determine environmental press. Others felt it was unnecessary for teachers to be aware of the school climate.

A second group was reluctant to provide personal data. They

seemed to think that such information might somehow reflect upon them and their ability as teachers.

A third group, a small minority, were hostile to the investigation. They questioned the study's general purpose and usefulness. Most of their negative comments were not substantiated by the findings.

The general observation concerning teachers is that those who responded seemed positively interested in the study and its results. The skewness of many of the 30 HSCI scales and the degree of variance, which approximated that of students, indicated that teachers did in fact give considerable thought and time to the study.

Students

Data were obtained from 270 Capitol City High Students. Subsequent to the testing periods the investigator had an opportunity to discuss the instrument with some students and noted their general reactions to it. Of those who volunteered opinions, a majority believed that most HSCI statements had a bearing on their school environment. These students seemed to be saying, in their own way, that they were aware of a particular type of social climate in the school, especially with respect to the administrative conduct of the institution.

The investigator's general impression was that most students appeared overtly interested and sincere in responding to the HSCI and

student questionnaire. In these private discussions with students no negativism was detected.

Hypothesis One

The results of the study show that in Capitol City High School, the explicit and implicit objectives are somewhat incongruent. Teachers perceived the press of the school differently than students on 17 HSCI scales. What contributes to such major discrepancies? Upon examination of the HSCI items within each scale, a number of explanations are suggested which may at least partially account for these differences.

The most apparent explanation seems to be the teachers' failure to understand the consequences of their behavior toward students. This contention gains support from the three HSCI scales (p. 62-65) on which the greatest perceptual differences between teachers and students were noted; "abasement-assurance," "objectivity-projectivity," and "succorance-supplication."

On the "succorance-supplication" scale for example, the findings indicate that students perceived teachers to be disinterested in them and not genuinely concerned with their feelings or problems. Students were also likely to view teachers as being unfriendly, impersonal, and unwilling to help students.

When teachers were compared to students on the "objectivity-

projectivity" scale, students perceived the school environment as not being objective. Students saw teacher favoritism, moodiness, and defensiveness. They also perceived a degree of unfairness and lack of understanding on the part of school personnel.

On the "abasement-assurance" scale, students to a greater extent than teachers perceived lack of teacher patience, teacher disinterest in student opinions, scapegoating, student embarrassment, and being made to feel they were wasting the teacher's time.

Other scales likewise reflect the possibility that teachers are unaware of the way students perceive their behavior. On the "conjunctivity-disjunctivity" scale students saw classes as being poorly planned, assignments as being unclear, and little explanation to students concerning academic objectives. The "energy-passivity" scale suggests that students perceive classroom discussions as boring, teachers as having little interest in activities, and teachers as lacking energy and enthusiasm in teaching. Items within the "deference-restiveness," "reflectiveness," and "understanding" scales similarly seem to point toward this direction.

Students on all these scales perceived teachers' behavior more negatively than did the teachers. This finding suggests that even though teachers have intentions of behaving positively toward students, the behavior perceived by students is quite different. Teachers are not conveying to students the objectives they explicitly express. Since

teachers have explicitly expressed a certain standard with respect to school climate which is different from what students perceive, it seems apparent that teachers are unaware of the effect their behavior has upon students.

School personnel must become more aware of the consequent impact their behavior has upon students. Often faculty believe they behave objectively and fairly, but the message that is conveyed to students is a negative one. Rather than disregarding student criticism, it should be examined objectively for any validity or truth it may contain. By listening to students, teachers can learn how students view teacher behavior.

A closely related point is that teachers may perceive the environment more idealistically than students. Rather than perceiving the school climate objectively, teachers may have difficulty freeing themselves from their own frame of reference as educators. Teachers consequently may perceive environmental elements in a distorted fashion, that is, in a manner which reinforces their personal expectations.

This contention is supported by the items contained in a number of scales. For example on the "reflectiveness," "science" and "humanism" scales, teachers perceive themselves as welcoming student ideas and as encouraging student imagination. They thought the school had good science teachers. Teachers also perceived students as having

high intellectual interests in the humanities and science.

On the "deference-restiveness" scale teachers perceived themselves as being admired by students, as being tolerant of diverse opinions. Teachers generally saw themselves as being given much more deference than was actually the case.

Teachers perceived a high degree of conjunctivity. They believed classes to be well planned and assignments to be clear. Teachers likewise saw much energy in the school environment. They thought classes were interesting and discussions exciting. Teachers saw themselves as having a high interest in what they were doing and as being enthusiastic about their work. Students, however, tended to perceive press relative to all these points in the opposite direction.

It may be that teachers do not view the school atmosphere objectively in relation to their own behavior as it contributes to the climate of the school. They seem to perceive the environment "through rose-colored glasses"; they tend to see themselves in a favorable light with respect to the school.

It is necessary, however, for teachers to be objective concerning their own behavior in the context of the school. Until teachers become cognizant of the effect their behavior has upon students they cannot undertake measures of altering implicit press. Teachers must find means by which they can gain a better perspective from which to evaluate their own behavior toward students.

Another important factor contributing to these significant differences is that students may not clearly comprehend the school's objectives and goals. Teachers who want to create student interest in academics may be failing because students see little relationship between daily classroom activity and their future academic needs.

Evidence which supports this notion is reflected by the "conjunctivity-disjunctivity" scale. Students indicated teachers frequently did not clearly explain what students could get out of their classes and why the material was important. Because teachers may better understand these long range objectives than students, they would also be more likely to perceive the significance of classroom discussions, and the necessity for certain course requirements. Moreover, teachers would understand the reasons for fire drills, health check-ups, and safety consciousness in the school to a greater extent than students. Scales which include these items are "harm avoidance-risktaking," "energy-passivity," "reflectiveness," and "understanding."

Teachers, having an understanding of academic objectives, must effectively communicate these goals to students. Means should be devised by which students can gain a better understanding of the school's long range objectives, and of the rationale on which teacher behavior is based. More frequent class discussions could be conducted around the topics of long range goals. Teachers and

administrators should include students in the formulation of school objectives. Whatever the method, it is imperative that students understand the relationship of present curricula to their future life.

The findings further suggest that teachers may not be aware of the impact and influence of other students and their culture upon the adolescent. In the literature discussed earlier, Coleman (1961) found peer pressure prevalent in "adolescent society." Therefore much of the press detected by the HSCI would appear to be peer press about which teachers may have little knowledge. Whether teachers ever can or should be aware of the many behavioral dynamics operating within the educational institution is another point which is also subject to argument. However it is apparent that students do have a profound effect upon one another. This would seemingly have an indirect relationship to students' classroom behavior.

Peer press is evident in the "dominance-tolerance" the "nurturance-rejection," and "energy-passivity" scales. In these scales students perceive student cliques, pressure from student leaders, pressure from peers, lack of acceptance by upper-classmen or their classmates, and unfriendliness on the part of other students. It would seem then that students, who are the subjects of peer pressure, would be much more aware of it than teachers. This factor may account for student-teacher discrepancies in perceptions of the school climate relative to the scales mentioned.

With respect to teenage culture, Coleman has indicated adults have little knowledge of adolescent standards of behavior. Teachers are therefore not likely to be aware of certain student behavior such as smoking and drinking, driving cars, the subjects of their private discussions, their reasons for certain manners of dress, and other general activities students engage in in the absence of adults. Perceptions relevant to these points were part of the "harm avoidance-risktaking," "humanism," "reflectiveness," "science," and "sensuality-puritanism" scales.

Finally the fact that teachers are a more permanent part of the school, with longer tenure, may account for perceptual differences. Teachers perceived the school as being characterized by less change from year to year than students with respect to assignments, text books, ideas, and activities. Students who pass through the school in three years, would seem to perceive change in the mentioned areas. That perceptions vary with the duration of tenure in the school will become more apparent in the comparisons of different student grade levels in hypothesis three.

It seems that in order for schools to be more successful the perceptions of teachers and students need to be congruent. When implicit press is similar to the intended goals, both teachers and students are striving toward similar ends and more effective education can then occur.

Teachers need to understand their individual and collective perceptions of the environmental press in relation to those of students. When teachers comprehend their own perceptions they can begin to change their behavior and also can begin to manipulate the environment so that their implicit behavior will be in greater harmony with their overt intentions.

Teachers and administrators can take overt steps to change the implicit press students perceive relative to the HSCI items. Many of these 300 statements concern factors which can be easily changed to more satisfactorily characterize the explicit objectives or intentions of the school. This should occur in those areas in which students perceive press considered undesirable by the faculty of the school.

Hypothesis Two

The results relative to the second hypothesis show that various groups of teachers, in Capitol City High School, perceived the explicit press of the school differently. This finding agrees with the results of other studies discussed in the literature which show that teachers behave differently toward students depending upon their own demographic characteristics.

In the present study the discrepancies among teacher perceptions were found to be related to sex, age, and academic preparation.

The fact that perceptions vary in relation to sex suggests that this

may be in part a function of cultural values as Hoedel (1965) contends. American society places a high degree of emphasis on achievement, especially for men. Consequently male teachers are more likely to perceive elements of achievement in the school environment than female teachers. These values may have been reflected in the press the male teachers perceived on scales of achievement, change, ego achievement, energy, fantasied achievement, science, and understanding. All these scales contain a large number of items relative to achievement, competition, and planning for the future.

Another factor which may have contributed to these discrepant perceptions is that males may identify more closely with their profession than females. Women in American society conventionally have viewed their basic role as homemakers. They may therefore consider their role as teachers secondary. Males on the other hand are placed in the breadwinner role and may therefore identify themselves closely and intimately with their life's work.

Youth are usually thought to be vigorous and energetic. They demand much room in which to maneuver both socially and intellectually. They might well be expected to be more sensitive than their elders to any restrictions placed upon them in this regard. The findings seem to support such a contention. Younger teachers perceived more press than older teachers toward dominance, order, passivity, and less in the direction of counteraction. They seemed to have seen the

environment as being restrictive in nature. Moreover it appears that these perceptions were also related to their seeing more press toward abasement than older teachers.

Differences in the types of classroom activities may account for differences in teacher perceptions with respect to academic preparation. Non-academic teachers instruct courses in which students are highly active. It would appear these teachers would perceive the environment as pressing toward energy, achievement, and change. Conversely academic teachers are engaged in teaching courses of an inactive nature, that is, highly verbal and abstract subjects. It would seem these teachers would tend to perceive the environment as characterized by passivity, sameness, and low achievement.

Phenomenological theory assumes that individuals behave in accordance with their perceptions. Various teacher groups who perceive the environment differently would behave differently. Teacher behavior toward students then is a function of certain demographic characteristics such as age, sex, and academic background. It would appear that the press perceived by students will at least be partially dependent upon the types of teachers with which the student has contact.

Because of the important contributions teachers make toward creating the climate of the school, their differential behavior with respect to their perceptions of explicit objectives may create serious

dilemmas for the student. Teachers having different expectations of students may create a problem for the student in expressing the appropriate standard of behavior demanded by each instructor.

Assuming behavior to be a function of perception, means must be discovered which would minimize conflicting behavioral expectations of students by teachers. All students cannot compartmentalize various levels of behavioral standards. Where such behavior differences among teachers affect students, teachers and administrators need to jointly work out a set of objectives and policies as an operational guide. It is understood that total harmony among all faculty groups, with respect to such objectives, may never be achieved. Difficulty will arise as a result of differing philosophies, needs, values, attitudes, etc. Teachers nevertheless must attempt to attenuate these differences.

Direct comparisons between specific subgroups of teachers and students was beyond the scope of the study. It seems, however, that certain groups of faculty more than others have perceptions more congruent with those of students.

Hypothesis Three

The findings of this study indicate that student perceptions of environmental press vary in relation to grade level, sex, and academic achievement. These results are in agreement with most of the

environmental studies previously discussed.

It appears that environmental perceptions change with continued exposure to the environment. Sophomores perceived the greatest press on all eight HSCI scales found to be significant with respect to grade level.

Why do changes in perception occur from the time students enter school until graduation? A number of hypotheses seem plausible. First, it would seem that students having little experience in the school would hold expectations which are incongruent with the situation as it "really" exists. As they become more familiar with the institution, they adjust their "beliefs" in accordance with reality.

The higher scores on many HSCI scales reflect more positive goals. A downward trend in scores from the sophomore to the senior years should therefore create concern among educators. For example, students who enter the school as sophomores perceive higher achievement, affiliation, change, science, and work, become disillusioned with gained experience, and subsequently perceive the environment more negatively. It seems evident that the implicit press of school personnel and peers is pressing students in a direction opposite from that which educators desire.

Maturity may result in changed perceptions. This becomes evident on such HSCI scales as emotionality, exhibitionism, impulsiveness, and play. On all of these scales sophomores scored higher than

juniors and seniors. Accordingly juniors and seniors may tend to agree more than sophomores with such a statement as "most students respond to ideas and events in a pretty cool and mild mannered way," and disagree with such statements as "students like to draw attention to themselves," or "students frequently do things on the spur of the moment."

Male and female students perceived the environment differently. These findings are also generally in agreement with results of previous research. For example, it is usually accepted that boys have more negative attitudes toward school than girls. In the present study this was borne out. Males perceived more abasement, rejection, and less reflectiveness in the environment than females. Conversely, females saw the environment as characterized by assurance, nurturance, and a high degree of reflectiveness. Girls also perceived the environment as more objective than boys.

Cultural values and expectations may partially explain the differential press perceived by the two sexes on certain scales. Girls, who are conventionally expected to be well groomed, are pressed toward concerning themselves extensively with their appearance. They tended to agree with such statements on the narcissism scale as "looking and acting 'right' is very important to teachers and students here."

Females are also permitted to express their emotions more

freely than males in American society. This may partly account for their high scores on the emotionality and sensuality scales. Items characteristic of these two scales with which girls tended to disagree were "an open display of emotion such as crying would embarrass teachers," and "there is practically no one here who would feel comfortable participating in modern dance or ballet."

The girls' high interest in the opposite sex during the secondary school period is apparent in their scores on the sexuality scale. They tended to agree more frequently than boys with such statements as "students here spend a lot of time talking about their boy-friends or girl-friends."

When students were grouped according to academic achievement, differential perception of press was also discovered. Low achieving students perceived the environment negatively. They saw it as characteriszed by abasement and by aggression. High achieving students perceived the environment as pressing less toward an interest in the opposite sex than low achievers.

Low achievers felt the environment to be less objective than high achievers. Examination of the HSCI items relevant to the "objective-projective" scale sheds light on this matter. Low achievers tended to disagree with items such as "if a student thinks out a report carefully teachers will give him a good mark even though they don't agree with him," and "no one needs to be afraid of expressing a point of view that

is unusual or unpopular in this school."

This last finding implies that low achieving students perceived press discouraging them from pursuing the expression and development of their own thoughts and ideas. It is imperative that teachers change such student impression, for student reluctance to respond may further jeopardize academic achievement. Similarly, teachers need to evaluate their own attitudes toward low achievers to determine whether in fact they are implicitly biased against them.

The findings of the study relative to Hypothesis Three have important implications for the conduct of the school. The results emphasize that students perceive the educational institution differently, and that their varying perceptions are related to certain demographic characteristics. Since these differences among students are present, teachers could gain a much better understanding of student behavior from observing particular groups of students.

Teachers and counselors often lament the large number of students for whom they are responsible. This fact has often been used as a basis for the claim that classroom teachers and counselors cannot possibly attend to individual students' problems. However since a portion of behavior is group related it would seem helpful for school personnel to understand students in relation to their groups. Even though this is not suggested to direct attention away from the individual student, it does appear that an understanding of group

perceptions would contribute to a better understanding of individual behavior.

More importantly, school personnel may focus attention upon the differences in perceptions among various student groups. Why, for example, do boys and low achievers perceive the school more negatively? Why do environmental perceptions become more negative with prolonged exposure to the school?

A number of factors may interact to create these perceptions. However, one of these would certainly include treatment by teachers. Classroom instructors who may not be consciously aware of differential behavior toward students must become more sensitive to consequences of their own behavior in the school. Teachers must understand their own values, needs, and attitudes, so that these do not become a basis for biased treatment of students with contrary value systems. Values and attitudes are such an intimate part of the human personality that often respect for another's is overlooked.

In general it seems that school personnel need to recognize that differential perceptions exist on the part of student groups. Such different perceptions are likely to result in different behavior norms for each of these groups. Different perceptions need to be studied and understood.

Summary

Environmental press results from a complex of interacting forces. Some factors contributing to press have been suggested here.

Teachers and students perceived the environment differently on 17 HSCI scales. Six points have been discussed relative to these perceptual differences. First, teachers probably fail to comprehend the effect their behavior has upon students. Second, teachers may perceive the school environment more idealistically than students. Third, teachers may not be aware of the pressure students experience from their peers. Fourth, teachers may have little insight into "adolescent society." Fifth, students may not clearly understand the goals of the school. Finally, most teachers have a longer tenure in the school than students which may account for perceptual differences.

Teachers' perceptions were found to be a function of certain characteristics. These included sex, age, and academic preparation. Perceptual differences relative to sex may be largely cultural in origin. Differences between age groups may be due in part to the young's less rigid social and intellectual behavior patterns. The nature of classroom activities may account for perceptual differences with respect to academic or non-academic teachers.

Student groups perceived the school differently. Grade level, sex, and academic achievement affect environmental perception.

Prolonged exposure to the environment seemed to influence perception. Maturity may likewise have contributed to perceptual differences among grade levels. Cultural values may affect perceptions with respect to sex. Males perceived the school more negatively than females. Low achievers also saw the school more negatively than high achievers. The fact that perception was found to be a function of the group may indicate that educators need to understand particular student groups as well as individuals.

CHAPTER VII

A SUMMARY OF THE STUDY

This chapter will briefly summarize the entire study. The major points of each previous chapter will be reviewed. The intent of the chapter is to provide the reader with a concise overview of the investigation.

The chapter is divided into seven sections. These include the study's purpose, its conceptual framework, the three hypotheses, the methodology, findings, implications, and suggestions for future research.

Purpose

The purpose of the study was to determine whether any differences were present in the perceptions of environmental press by various groups in a secondary school setting. The specific groups with which the study was concerned were teachers and students.

Conceptual Framework

This study was based on the concept of "press." Press is a construct which expresses the assumption of elements in the environment which generate forces that are perceived by individuals and thereby affect their behavior. Important to the concept of press is the

assumption that behavior is a function of perception.

The press construct is broken down into two component parts, "alpha press" and "beta press." Alpha press is the environment as it exists in reality. In the school, alpha press corresponds to the explicit or stated goals of the institution. It is the environment as intended by its major participants.

The second type of press is beta press. Beta press is composed of two elements, common beta press and individual beta press. Individual beta press is that part of the environment which is peculiar to the perception of an individual. Common beta press consists of these elements in an environment which are so salient that they are perceived by most members of a functional group. In the school common beta press may consist of behavior on the part of teachers that is so consistent, and so apparent to students, that most students agree to its presence. The common beta press of an institution correspond to its implicit goals. These are the ends toward which the actual behavior of the institution's major participants presses students.

Pace and Stern (1958) believe that for efficient education explicit goals and implicit teacher behavior must be congruent and need to reinforce one another.

Herr (1965a) contends that press is differentially expressed by teachers toward various groups of students. It might be expected that these different groups of students would perceive the implicit

press of the institution differently. Similarly, it is conceivable that different groups of teachers might perceive explicit press differently.

Hypotheses

Three hypotheses were tested to determine whether perceptual differences do exist with respect to environmental press. These were as follows:

1. Secondary school teachers perceive the institution's explicit objectives differently than secondary school students perceive the institution's implicit press.

2. Different groups of secondary school teachers perceive the institution's explicit objectives differently. These differing perceptions are a function of the teacher's age, sex, experience in the school, academic preparation, and marital status.

3. Different groups of secondary school students perceive the implicit press of the school environment differently. These differing perceptions are a function of the student's grade level, sex, grade average, educational plans, and the educational level of the student's parents.

Methodology

The following procedures were followed in testing the three stated hypotheses.

The School

A senior high school was selected for the study. The school was located in a city of 70,000 in the Pacific Northwest. Capitol City High, a fictitious name, had a population of 1,850 students. The administration consisted of a principal, two assistants, a dean of boys and a dean of girls. There were four full time and two half-time counselors in the school. The faculty numbered 86.

The Instrument

The Stern High School Characteristics Index (HSCI) was used to quantify teachers' and students' perception of institutional press. This instrument consists of 300 items which are intended to correspond to the environmental press conditions that are likely to facilitate or impede the students' expression of those conditions.

Teachers

The HSCI and a questionnaire were given to all 86 Capitol City High faculty. The questionnaire identified the respondents' sex, age, academic preparation, experience within the present school, and the teachers marital status.

Students

Two hundred seventy students were randomly selected as subjects for the study. An equal number of 90 was chosen from the sophomore, junior, and senior classes.

A questionnaire given to students identified their grade level, sex, academic grade average, educational plans subsequent to high school graduation, and their parents' level of educational attainment.

Independent Variables

The independent variables in the study were: 1) For teachers, their sex, age, academic preparation, experience, and marital status. 2) For students, and their grade level, sex, grade average, educational plans, and their parents' level of educational attainment.

Dependent Variables

The dependent variables were the 30 individual HSCI scales. These included 1) abasement-assurance; 2) achievement; 3) adaptability-defensiveness; 4) affiliation-rejection; 5) aggression-blame avoidance; 6) change-sameness; 7) conjunctivity-disjunctivity; 8) counteraction-inferiority avoidance; 9) deference-restiveness; 10) dominance-tolerance; 11) ego achievement; 12) emotionality-placidity; 13) energy-passivity; 14) exhibitionism-inferiority avoidance; 15) fantasied

achievement; 16) harm avoidance-risk taking; 17) humanism; 18) impulsiveness-deliberation; 19) narcissism; 20) nurturance-rejection; 21) objectivity-projectivity; 22) order-disorder; 23) play-work; 24) practicalness-impracticalness; 25) reflectiveness; 26) scientism; 27) sentience-puritanism; 28) sexuality-prudishness; 29) succorance-supplication; 30) understanding.

Data Analysis

To test Hypothesis One the means of each HSCI scale for teachers and students were compared. A two-tailed 't' test was used to calculate the difference between the means of the scales. The .05 level of confidence was used as the level of critical difference.

For the second and third hypotheses an analysis of variance was used to determine whether differences existed between the various groups being examined. The .05 level of confidence was also used as the level of critical difference.

Findings

Hypothesis One

The first and major hypothesis of the study was accepted. Significant differences were found between teachers and students on 17 HSCI scales. Fourteen of these were significant at the .001 level, one at the .01 level, and two at the .05 level.

Students perceived the environment as pressing toward abasement, adaptability, disjunctivity, restiveness, rejection, projectivity, and less toward understanding. Students also perceived greater press toward passivity risktaking, and puritanism; and less toward tolerance than teachers.

Teachers, on the other hand, perceived press toward science, humanities and social science, reflectiveness, and sameness. They also saw the environment as characterized by ego achievement and succorance.

Pace and Stern's (1958) contention that incongruities often exist between explicit or formally intended goals and the implicit behavior of teachers perceived by students seems valid.

Hypothesis Two

The five independent variables examined relative to Hypothesis Two were the teachers sex, age, academic preparation, experience, and marital status.

With respect to sex, significant differences in perception of explicit press were found on eight HSCI scales. Males perceived press toward achievement, change, energy, impulsiveness, science, and understanding. Women perceived less press than men toward ego achievement and fantasied achievement.

When age was considered, significant differences were noted

on seven HSCI scales. Younger teachers perceived explicit press toward abasement, adaptability, passivity, and order. Older teachers perceived explicit press toward tolerance, counteraction, and science.

Academic preparation significantly affected teacher perceptions of explicit press on five HSCI scales. Academic teachers perceived more press toward abasement, and adaptability, and less toward change, energy, and ego achievement than non-academic teachers.

Teachers' length of experience in the school and their marital status were not found to significantly affect perceptions of explicit press.

The second hypothesis was accepted as it relates to sex, age, and academic preparation.

Hypothesis Three

The independent variables examined relative to Hypothesis Three were student grade level, sex, academic achievement, educational plans, and level of educational attainment by the student's parents.

Significant differences between grade levels were discovered on eight HSCI scales. Sophomores perceived more implicit press than juniors and seniors on all eight scales. These included achievement, affilation, change, emotionality, exhibitionism, impulsiveness, play,

and science. Juniors perceived the least press on five scales. They saw less press than sophomores and seniors toward affiliation, exhibitionism, impulsiveness, play, and science.

Students' sex affected perceptions of implicit press on nine HSCI scales. Females perceived press toward assurance, emotionality, exhibitionism, narcissism, nurturance, prudishness, sensuality, objectivity, and reflectiveness.

Lower academic achievers perceived the school environment differently than higher achievers on five HSCI scales. Lower achievers perceived press toward abasement, aggression, projectivity, and sexuality. Higher achievers perceived press toward defensiveness.

Minimum differences were found between students having unlike plans and between students whose parents had different educational levels.

Hypothesis Three was accepted as it relates to grade level, sex, and academic achievement.

Implications

1. Secondary teachers perceive the institutional press differently than do students within the same environment.

2. Secondary teachers with varying demographic characteristics perceive the institutional press differently. These differences

are a function of the teachers' sex, age, and academic preparation in college. The number of years of experience in the school and teachers' marital status do not appear to affect environmental perceptions.

3. Various groups of secondary school students perceive the school environment differently. These discrepant perceptions are a function of students' grade level, sex, academic achievement, and probably educational plans. Parental educational attainment seems not to affect the students' environmental perceptions.

Future Research

The findings of this study have raised the following questions which might be the subjects of future research:

1. Do teachers generally perceive the school environment differently than students?

2. Why do different groups of students and teachers perceive the environment differently?

3. Are there certain groups of teachers whose environmental perceptions are more congruent with those of students? The present study indicates this may be true.

4. Are there other student characteristics which can be isolated with respect to their effect on environmental perceptions? Similarly various levels within each of these variables might be explored.

5. Finally and most importantly, can methods be devised by which environmental perceptions are altered? Some of the following areas relative to this question might be explored:

a. What would be the impact on student perceptions if teachers became more sensitive to students?

b. What effect would individual and/or group counseling have upon student-teacher environmental perceptions?

c. What effect would class discussions and faculty discussions have upon student and teacher environmental perceptions respectively?

BIBLIOGRAPHY

Abel, Harold and Ruby Gingles. 1965. Identifying problems of adolescent girls. Journal of Educational Research 58:9.

Ausubel, David P., Herbert M. Schiff and Majorie P. Zeleng. 1954. Validity of teachers' rating of adolescents' adjustment and aspirations. Journal of Educational Psychology 45:394-406.

Baker, Harry Leight. 1938. High school teachers' knowledge of their pupils. School Review 37:175-190.

Baker, S. R. 1966. The relationship between student residence and perception of environmental press. Journal of College Student Personnel 67:222-224.

Barclay, James R. 1967. Approach to the measurement of teacher press in the secondary school curriculum. Journal of Counseling Psychology 14:551-567.

Beilin, Harry and Emmy Werner. 1957. Sex difference among teachers in the use of criteria of adjustment. Journal of Educational Psychology 48:426-436.

Biglow, Gordon S. and Ray A. Humphreys. 1967. What kind of problems do they bring? Student-counselor perceptions vary. School Counselor 14:157-160.

Brown, Iva Dinkens. 1966. Role of perception of secondary teachers as related to pupils' perceptions of teacher behavior characteristics. Ed.D. thesis. Athens, University of Georgia. 157 numb. leaves.

Bushinger, Joseph S. 1966. Organizational climate and its relationship to school dropouts. Ed.D. thesis. New Brunswick, New Jersey, Rutgers University. 110 numb. leaves.

Callahan, Sterling G. 1966. Successful teaching in secondary schools. Atlanta, Scott Foresman. 566 p.

Campbell, Paul S. 1964. Personality needs of community college and university students and their perceptions of the press of their institutions. Ph.D. thesis. East Lansing, Michigan State University. 125 numb. leaves.

Carter, Robert Scriven. 1952. How invalid are marks assigned by teachers? Journal of Educational Psychology 43:218-228.

Cauldill, Ann Conrad. 1966. Student perceptions of a Midwestern high school environment. Ph.D. thesis. Bloomington, Indiana University. 187 numb. leaves.

Cheyney, Arnold B. 1966. Teachers of the culturally disadvantaged. Exceptional Child 33:83-88.

Coleman, James. 1961. Social climates in high schools. In: Dept. of Health, Education and Welfare Cooperative Research Monograph no. 4. OE33016. Washington, D. C. U. S. Gov. Printing Office. 75 p.

Combs, Arthur W. and Donald A. Snygg. 1959. Individual behavior, a perceptual approach to behavior. Rev. ed. New York, Harper. 522 p.

Combs, Charles F. 1964. Perceptions of self and scholastic under-achievement in the academically capable. Personnel and Guidance Journal 43:47-51.

Coster, John K. 1959. Some characteristics of high school pupils from three income groups. Journal of Educational Psychology 50:55-62.

Crowley, Francis J. 1960. How well can teachers estimate student goals? Educational Administration and Supervision 45:319-328.

Danskin, David G., Carroll E. Kennedy Jr. and Walter S. Friesen. 1965. Guidance, the ecology of students. Personnel and Guidance Journal 44:130-135.

Dobsen, Russell Lee. 1965. The perception and treatment by teachers of the behavioral problems of elementary school children in culturally deprived and middle class neighborhoods. Ph.D. thesis. Norman, University of Oklahoma. 125 numb. leaves.

Duling, John A. 1969. Differences in perceptions of environmental press by selected student subgroups. Journal of the National Association of Women Deans and Counselors 32:130-132. Spring.

Eargle, Zane E. 1963. Social class and student success. High School Journal 46:162-169.

Gage, N. L. and George Suci. 1951. Social perceptions and teacher-pupil relationships. Journal of Educational Psychology 42:144-152.

Garrison, Karl C. and Ben W. Cunningham Jr. 1952. Personal problems of ninth grade pupils. School Review 60:30-33.

Gelso, Charles J. and David M. Sims. 1968. Perceptions of a junior college environment. Journal of College Student Personnel 9: 40-43.

Gordon, Ira J. 1956. The teacher as a guidance worker, human development concepts and their application in the classroom. New York, Harper. 350 p.

Gronlund, N. E. 1950. The accuracy of teachers' judgements concerning the sociometric status of sixth grade pupils, part 1. Sociometry 13:197-225.

Grow, Milton D. 1956. An analysis of problems of students in selected junior high schools. Ph.D. thesis. Evanston, Illinois, Northwestern University. 122 numb. leaves. (Microfilm)

Hackler, James C. 1961. Teacher attitudes in Vienna toward working class children. Clearing House 35:457-460.

Hanson, Earl H. 1963. What does marriage do to teaching? National Education Association Journal 52:8-10+. November.

Hayden, James Richard. 1956. An analysis of personal-social problems considered important by the junior high school adolescent according to sex, grade, age, intelligence quotient and bilingualism. Ph.D. thesis. Boston, Boston University. 670 numb. leaves.

Herr, Edwin. 1965a. Field theory and differential press: implications for counseling. Personnel and Guidance Journal 43:586-590.

_____ 1965b. Differential perceptions of environmental press by high school students as related to their achievement and participation in activities. Personnel and Guidance Journal 52: 678-686.

Herr, Edwin and James C. Hansen. 1966. School truancy and environmental press. School Counselor 14:101-105.

Hill, Henry H. 1965. Experience is the best teacher. Educational Forum 30:61-65.

Hoedel, Sister M. Celestine. 1965. Adolescent sex differences and secondary education. Journal of Secondary Education 40:361-368.

Jersild, Arthur T. 1957. The psychology of adolescence. New York, Macmillan. 438 p.

Jones, Arthur J. 1951. Principles of guidance. New York, McGraw Hill. 305 p.

Jones, John E. 1968. Components of the high school environment. Personnel and Guidance Journal 47:40-43.

Joyce, Bruce R. and Berj. Harootunian. 1967. The structure of teaching. Chicago, Science Research Associates. 258 p.

Kasper, Eugene C., Paul F. Munger and Rogers Myers. 1965. Student perceptions of the environment in guidance and non-guidance schools. Personnel and Guidance Journal 43:674-677.

Kight, Howard R. and James C. Hansen. 1967. The relation of students' needs to their perceptions of a high school environment. Journal of Educational Research 61:51-52.

King, S. H. 1964. Emotional problems of college students. American Association of University Professors' Bulletin 50:327-332.

Lund, Richard M. 1967. Types of student problems as a function of year in college for males and females. College and University 42:221-231. Winter.

McFee, Ann. 1961. The relation of students' needs to their perceptions of a college environment. Journal of Educational Psychology 52:25-29.

McNemar, Quinn. 1955. Psychological statistics. Sec. Ed. New York, John Wiley. 408 p.

Mendell, Edward Allan. 1968. Teachers', counselors' and deans' perceptions of disruptive student behavior. Ph.D. thesis. Palo Alto, California, Stanford University. 105 numb. leaves.

Meyer, William J. and George G. Thompson. 1956. Sex differences in the distribution of teacher approval and disapproval among sixth grade children. Journal of Educational Psychology 47: 385-396.

Mitchell, James V. Jr. 1968. The identification of student personality characteristics related to perceptions of the school environment. School Review 76:50-59.

Mooney, R. L. 1943. Personal problems of freshman girls. Journal of Higher Education 14:84-90.

Moore, Helene. 1950. Adult awareness of the problems of high school youth. Ph.D. thesis. Boston, Boston University. 135 numb. leaves.

Muma, John R. 1965. Peer evaluations and academic performance. Personnel and Guidance Journal 44:405-409.

Noble, Gladys V. and Torster S. E. Lund. 1951. High school pupils report their fears. Journal of Educational Sociology 25:97-101.

Nunnery, Michael Y. and Bob J. Gilliam. 1962. A study of secondary teachers' knowledge of pupils as related to selected pupil characteristics. National Association of Secondary School Principals' Bulletin 46:101-107.

Pace, C. R. 1958. Educational objectives. In: The integration of educational experiences. Washington, D. C., National Society for the Study of Education Yearbook Part 3:69-83.

Pace, C. R. and George G. Stern. 1958. An approach to the measurement of psychological characteristics of college environments. Journal of Educational Psychology 49:268-77.

Perelli, Doreen Lesley. 1966. The effects of teachers on the self concept of junior high school students as reported by the students themselves. Ph.D. thesis. Ithaca, New York, Cornell University. 237 numb. leaves.

Ramey, William Edward. 1964. A study of selected variables of the High School Characteristics Index. Ed.D. thesis. Tempe, Arizona State University. 121 numb. leaves.

Rich, John Martin. 1960. How social class values affects teacher-pupil relations. Journal of Educational Sociology 33:355-359.

Sargent, James Currier. 1966. An analysis of principal and staff perceptions of high school organizational climate. Ph.D. thesis. Minneapolis, University of Minnesota. 260 numb. leaves.

Schmuck, Richard. 1965. Concerns of contemporary adolescents. National Association of Secondary School Principals' Bulletin 49:19-28. April.

Sears, Pauline and David Feldman. 1966. Teacher interactions with boys and girls. National Elementary Principal 46:57-8. November.

Sprinthall, Norman. 1964. A comparison of values among teachers, academic underachievers, and achievers. Journal of Experimental Education 33:193-196. Winter.

Starr, Irving S. 1953. An analysis of the problems of senior high students according to age, sex, and intelligence quotient. Ed.D. thesis. Boston, Boston University. 181 numb. leaves.

Stegman, Wilbur Nuel. 1967. A descriptive study of certain socio-psychological characteristics of selected secondary school environments. Ph.D. thesis. Stillwater, Oklahoma State University. 130 numb. leaves.

Stern, George G. 1963. Scoring instructions and college norms, Activities Index - College Characteristics Index. (manual). Syracuse, New York, Psychological Research Center. 28 numb. leaves.

Stern, George G., Morris I. Stein and Benjamin S. Bloom. 1956. Methods in personality assessment. Glenco, Illinois, Free Press. 271 p.

Stouffer, George A. Jr. and Jennie Owens. 1955. Behavior problems of children as identified by today's teachers and compared with those reported by E. K. Wickman. Journal of Educational Research 48:321-331.

Sturgis, Horace W. 1960. The relationship of the teacher's knowledge of student's background to the effectiveness of teaching. Journal of Engineering Education 51:119-123. November.

Thistlethwaite, Donald L. 1959. College press and student achievement. Journal of Educational Psychology 50:183-191.

_____ 1962. Rival hypotheses for explaining the effect of different learning environments. Journal of Educational Psychology 53:310-315.

Turner, Virginia Holmes. 1962. Teachers judgements of children's functioning, by sex and social class of child, in classrooms of different social and racial composition. Ph.D. thesis. Washington, D. C. Washington University. 145 numb. leaves.

Volpe, Frank Angelo. 1965. A correlation study of the relationship between teacher awareness of the concerns of seniors and student achievement. Ed.D. thesis. New York, New York University. 78 numb. leaves.

Walz, Garry and Juliet Miller. 1969. School climate and student behavior: implications for the counselors' role. Personnel and Guidance Journal 47:859-867.

Weinstein, Eugene A. and Paul N. Geisel. 1960. An analysis of sex differences in adjustment. Child Development 31:721-728.

Weiss, Robert Francis, S. J. 1964. Student and faculty perceptions of institutional press at Saint Louis University. Ph.D. thesis. Minneapolis, University of Minnesota. 339 numb. leaves.

Whitely, John M. 1967. Student stress, suicide, and the role of the university. National Association of Women Deans and Counselors' Journal 30:120-124. September.

Winfrey, James King. 1963. The appraisal of institutional press by selected groups of Minneapolis Area high schools. Ph.D. thesis. Minneapolis, University of Minnesota. 479 numb. leaves.

APPENDICES

APPENDIX A

PERSONAL DATA SHEETS

Teacher Questionnaire

DIRECTIONS: (READ CAREFULLY)

PLEASE:

1. Fill in the requested information on the teacher questionnaire and High School Characteristics Index (HSCI) as accurately and as fully as possible. All questions should be answered.

2. Read the instructions on the HSCI test booklet carefully. They are self explanatory.

3. Ignore the section on the HSCI answer sheet which is crossed out with a red pencil mark.

4. Upon completion return all materials, the teacher questionnaire, HSCI test booklet, and the HSCI answer sheet to the front office.

5. ALL INFORMATION SUBMITTED BY YOU WILL BE TREATED IN CONFIDENCE. No one will be permitted to examine individual responses to the HSCI except the researcher.

Thank you for your time and cooperation.

Anthony J. Buhl
Oregon State University

1. Name _____.

2. Male _____; Female _____.

3. Living with a Spouse _____; Living with a friend, relative, or by yourself _____.

4. College Major(s) _____; Minor(s) _____.
   _____; _____.

5. Age _____.

6. Number of Years Teaching in this School. Count the present year as one full year of experience _____.

7. Subject(s) you are presently teaching: _____

Student Questionnaire

DIRECTIONS

Please check only one space for each item listed, except for number six which requires that you circle one number for each of your parents. ALL INFORMATION SUBMITTED BY YOU WILL BE KEPT IN THE STRICTEST CONFIDENCE.

1. Name _____

2. Male _____ Female _____

3. Grade: Senior _____ Junior _____ Sophomore _____

4. What are your present plans after high school? If you are undecided check the one which you are most likely to choose.

   Employment _____ Military Service _____ College_____

   Vocational or Technical School _____ Other _____

5. What do you think your school grade average has been over the past year? (Includes Fall 1968 to the present)

   A, A-,_____ B+, B, B-,_____ C+, C, C-,_____ D+, D, D-,____

6. What is the highest number of years of completed education for your parents? If you are not sure circle the one you think it might be. Circle one for each parent.

	Elementary	High School	College
Father:	8 or less, 9,	10, 11, 12,	13, 14, 15, 16, 17+
Mother:	8 or less, 9,	10, 11, 12,	13, 14, 15, 16, 17+

7. How long have you gone to school at _____ High? Count the present year as one full year.

   One Year _____ Two Years _____ Three Years _____

APPENDIX B

COMPLETE TABLES OF DATA FOR EACH VARIABLE IN THE STUDY

Table of HSCI Scales

The following is a table of HSCI scales to provide a convenient key for the appendices attached below.

1. Abasement - Assurance.
2. Achievement.
3. Adaptability - Defensiveness.
4. Affiliation - Rejection.
5. Aggression - Blame Avoidance.
6. Change - Sameness.
7. Conjunctivity - Disjunctivity.
8. Counteraction - Inferiority Avoidance
9. Deference - Restiveness.
10. Dominance - Tolerance.
11. Ego Achievement.
12. Emotionality - Placidity.
13. Energy - Passivity.
14. Exhibitionism - Inferiority Avoidance.
15. Fantasied Achievement.
16. Harm Avoidance - Risktaking.
17. Humanities, Social Science.
18. Impulsiveness - Deliberation.
19. Narcissism.
20. Nurturance - Rejection.
21. Objectivity - Projectivity.
22. Order - Disorder.
23. Play - Work.
24. Practicalness - Impracticalness.
25. Reflectiveness.

26. Science.
27. Sensuality- Puritanism.
28. Sexuality - Prudishness.
29. Supplication - Autonomy.
30. Understanding.

"t"-Values for the Differences Between the Means of Teachers and Students.

	Teachers (N = 82)		Students (N = 270)			
Scale	$\bar{X}$	SD	$\bar{X}$	SD	DM	t
1.	2.94	1.99	4.65	2.37	-1.71	-6.52***
2.	5.91	1.96	5.66	1.88	.25	1.01
3.	3.46	1.59	4.62	1.58	-1.16	-5.81***
4.	6.02	2.31	6.16	2.00	- .13	- .46
5.	2.38	1.61	2.72	1.93	- .35	-1.63
6.	4.52	1.63	5.24	1.65	- .72	-3.48***
7.	7.34	1.94	6.11	2.19	1.23	4.88***
8.	5.76	2.00	5.61	1.75	.16	.64
9.	5.40	1.51	4.64	1.69	.77	3.90***
10.	5.06	1.99	6.15	2.04	-1.10	-4.35***
11.	5.79	2.02	5.20	2.16	.59	2.29*
12.	4.95	1.81	5.24	1.64	- .29	-1.31
13.	5.41	2.53	4.54	2.32	.87	2.78**
14.	5.13	2.19	5.49	1.92	- .36	-1.34
15.	4.61	1.84	4.59	1.63	.02	.08
16.	4.39	1.37	3.35	1.47	1.09	6.18***
17.	4.93	2.55	3.69	2.09	1.24	4.01***
18.	5.09	1.77	5.43	1.76	- .34	-1.56
19.	7.18	1.81	6.85	1.84	.33	1.43
20.	5.56	2.56	4.90	2.55	.67	2.06*
21.	7.62	2.08	5.73	2.78	1.90	6.64***
22.	5.74	1.34	5.83	1.54	- .09	- .49
23.	5.76	1.83	6.00	1.82	- .25	-1.08
24.	6.63	1.55	5.52	1.61	.12	.59
25.	6.45	2.04	5.32	1.94	1.13	4.44***
26.	6.37	2.19	5.12	1.89	1.24	4.64***
27.	5.68	1.54	4.87	1.92	.82	3.96***
28.	6.35	2.17	6.75	1.78	- .39	-1.50
29.	6.44	2.08	4.36	2.19	2.08	7.82***
30.	6.04	1.75	5.25	1.96	.78	3.45***

Degrees of Freedom = 350

.05 > 1.96*
.01 > 2.57**
.001 > 3.29***

F-Values for the Differences Between Teachers Compared on the Basis of Sex.

	Means		Mean Squares		
Scale	Male (N = 38)	Female (N = 44)	Between Groups	Within Groups	F Value
1.	2.57	3.25	9.18	3.89	2.35
2.	6.47	5.43	2.21	3.62	6.10*
3.	3.44	3.47	1.82	2.55	.007
4.	6.50	5.61	1.60	5.19	3.08
5.	2.23	2.50	1.41	2.59	.54
6.	5.10	4.02	2.38	2.40	9.93**
7.	7.78	6.95	1.42	3.62	3.91
8.	5.94	5.61	2.27	4.05	.56
9.	5.28	5.50	9.03	2.31	.39
10.	4.94	5.15	9.14	3.99	.22
11.	6.34	5.31	2.13	3.87	5.51*
12.	5.13	4.79	2.30	3.29	.69
13.	6.15	4.77	3.91	5.98	6.54*
14.	5.10	5.15	5.90	4.84	.01
15.	5.13	4.14	1.92	3.17	6.07*
16.	4.50	4.38	2.63	1.89	.14
17.	5.13	4.75	2.96	6.55	.45
18.	5.55	4.68	1.54	2.98	5.17*
19.	6.86	7.45	7.04	3.24	2.16
20.	6.07	5.11	1.90	6.41	2.96
21.	8.07	7.22	1.47	4.20	3.51
22.	5.86	5.63	1.09	1.80	.60
23.	6.00	5.54	4.21	3.33	1.26
24.	6.84	6.45	3.06	2.39	1.27
25.	6.76	6.18	6.89	4.11	1.67
26.	6.89	5.90	1.98	4.61	4.29*
27.	5.68	5.68	1.16	2.39	.00
28.	6.13	6.54	3.49	4.71	.74
29.	6.65	6.25	3.39	4.33	.78
30.	6.63	5.52	2.50	2.79	8.96**

Degrees of Freedom

Between Groups = 1
Within Groups = 80

Levels of Significance

.05 > 3.97*
.01 > 7.00**

F-Values for the Differences Between Teachers Compared on the Basis of Age.

Scale	Means: 29 Yrs. & Younger (N = 33)	Means: 30 Yrs. & Older (N = 49)	Mean Squares: Between Groups	Mean Squares: Within Groups	F Value
1.	3.60	2.48	2.45	3.70	6.64*
2.	5.57	6.14	6.34	3.82	1.65
3.	4.12	3.02	2.38	2.25	10.59**
4.	5.63	6.28	8.31	5.29	1.57
5.	2.63	2.20	3.68	2.56	1.43
6.	4.21	4.73	5.38	2.63	2.04
7.	6.93	7.61	8.92	3.69	2.42
8.	5.15	6.18	2.10	3.81	5.50*
9.	5.39	5.40	3.98	2.32	.001
10.	5.60	4.69	1.64	3.80	4.31*
11.	5.45	6.02	6.31	4.06	1.55
12.	5.03	4.89	3.45	3.31	.10
13.	4.72	5.87	2.60	6.14	4.24*
14.	5.27	5.04	1.06	4.83	.21
15.	4.24	4.85	7.45	3.32	2.24
16.	4.57	4.34	1.03	1.88	.54
17.	4.63	5.12	4.65	6.53	.71
18.	5.36	4.89	4.27	3.12	1.36
19.	6.93	7.34	3.27	3.28	.99
20.	5.48	5.61	3.20	6.64	.04
21.	7.36	7.79	3.68	4.34	.84
22.	6.30	5.36	1.72	1.60	10.76**
23.	5.87	5.67	8.31	3.37	.24
24.	6.78	6.53	1.30	2.42	.53
25.	6.24	6.59	2.40	4.17	.57
26.	5.69	6.81	2.47	4.55	5.43*
27.	5.51	5.79	1.55	2.37	.65
28.	6.24	6.42	6.83	4.75	.14
29.	6.15	6.63	4.56	4.32	1.05
30.	5.78	6.20	3.41	3.06	1.11

Degrees of Freedom

Between Groups = 1
Within Groups = 80

Levels of Significance

.05 > 3.97*
.01 > 7.00**

F-Values for the Differences Between Teachers Compared on the Basis of Academic Preparation.

Scale	Means: Academic (N = 50)	Means: Non Academic (N = 32)	Mean Squares: Between Groups	Mean Squares: Within Groups	F Value
1.	3.36	2.28	2.27	3.72	6.10*
2.	5.82	6.06	1.14	3.89	.29
3.	3.74	3.03	9.80	2.43	4.03*
4.	5.68	6.56	1.51	5.20	2.92
5.	2.42	2.31	2.25	2.61	.08
6.	4.18	5.06	1.51	2.51	6.04*
7.	7.12	7.68	6.28	3.72	1.68
8.	5.52	6.15	7.89	3.98	1.98
9.	5.54	5.18	2.42	2.29	1.05
10.	5.08	5.03	4.63	4.00	.01
11.	5.38	6.43	2.18	3.87	5.63*
12.	5.06	4.78	1.51	3.30	.45
13.	4.78	6.40	5.16	5.82	8.86**
14.	4.82	5.62	1.26	4.68	2.70
15.	4.38	4.96	6.76	3.33	2.02
16.	4.54	4.28	1.30	1.88	.69
17.	4.76	5.18	3.56	6.54	.54
18.	5.10	5.06	2.74	3.17	.008
19.	7.32	6.96	2.40	3.29	.73
20.	5.32	5.93	7.44	6.55	1.13
21.	7.40	7.96	6.31	4.31	1.46
22.	5.86	5.56	1.72	1.79	.96
23.	5.64	5.93	1.72	3.36	.51
24.	6.78	6.40	2.72	2.40	1.13
25.	6.14	6.93	1.24	4.04	3.06
26.	6.06	6.84	1.19	4.71	2.54
27.	5.54	5.90	2.61	2.36	1.10
28.	6.28	6.46	6.95	4.75	.14
29.	6.36	6.52	8.00	4.36	.18
30.	5.82	6.37	6.01	3.03	1.97

Degrees of Freedom
Between Groups = 1
Within Groups = 80

Levels of Significance
.05 > 3.97*
.01 > 7.00**

F-Values for the Differences Between Teachers Compared on the Basis of Teaching Experience in the Present School.

Scale	Means: Two Yrs. or Less (N = 47)	Means: Three Yrs. or More (N = 35)	Mean Squares: Between Groups	Mean Squares: Within Groups	F Value
1.	3.02	2.82	7.44	3.99	.18
2.	5.57	6.37	1.27	3.74	3.40
3.	3.44	3.48	3.03	2.55	.01
4.	5.68	6.48	1.29	5.23	2.48
5.	2.17	2.65	4.75	2.55	1.86
6.	4.34	4.77	3.72	2.65	1.40
7.	7.27	7.42	4.63	3.79	.12
8.	5.57	6.02	4.13	4.03	1.02
9.	5.40	5.40	3.63	2.32	.00
10.	5.17	4.91	1.31	3.99	.32
11.	5.76	5.82	7.86	4.14	.01
12.	4.91	5.00	1.45	3.32	.04
13.	4.87	6.14	3.23	6.06	5.34*
14.	5.23	5.00	1.09	4.83	.22
15.	4.34	4.97	7.98	3.31	2.40
16.	4.48	4.37	2.79	1.89	.14
17.	4.65	5.28	7.86	6.19	1.21
18.	5.27	4.82	4.02	3.12	1.28
19.	7.10	7.28	6.45	3.32	.19
20.	5.51	5.62	2.79	6.64	.04
21.	7.57	7.68	2.48	4.38	.05
22.	5.83	5.62	8.12	1.81	.44
23.	5.80	5.68	3.02	3.38	.08
24.	6.53	6.777	1.15	2.42	.47
25.	6.34	6.60	1.35	4.18	.32
26.	6.29	6.45	5.08	4.855	.10
27.	5.74	5.60	4.19	2.39	.17
28.	6.40	6.28	2.81	4.75	.05
29.	6.25	6.68	3.711	4.33	.85
30.	5.85	6.28	3.78	3.06	1.23

Degrees of Freedom
Between Groups = 1
Within Groups = 80

Levels of Significance
.05 > 3.97*

F-Values for the Differences Between Teachers Compared on the Basis of Marital Status.

Scale	Means: Living Without a Spouse (N = 20)	Means: Living With a Spouse (N = 62)	Mean Squares: Between Groups	Mean Squares: Within Groups	F Value
1.	3.15	2.87	1.17	3.99	.29
2.	6.05	5.87	4.84	3.89	.12
3.	4.05	3.27	9.10	2.44	3.73
4.	5.95	6.04	1.46	5.39	.02
5.	2.10	2.46	2.04	2.59	.78
6.	3.70	4.79	1.79	2.48	7.25**
7.	7.65	7.24	2.51	3.77	.66
8.	5.70	5.79	1.23	4.08	.03
9.	5.50	5.37	2.51	2.31	.10
10.	5.60	4.88	7.68	3.91	1.96
11.	5.90	5.75	3.04	4.13	.07
12.	4.95	4.95	3.93	3.32	.00
13.	5.00	5.54	4.54	6.41	.70
14.	5.00	5.17	4.76	4.83	.09
15.	4.40	4.67	1.16	3.40	.34
16.	4.50	4.41	9.83	1.90	.05
17.	5.30	4.80	3.68	6.54	.56
18.	5.00	5.11	1.92	3.17	.06
19.	7.35	7.12	7.38	3.31	.22
20.	5.75	5.50	9.45	6.64	.14
21.	7.20	7.75	4.70	4.33	1.08
22.	6.25	5.58	6.77	1.73	3.90
23.	5.90	5.70	5.47	3.38	.16
24.	6.35	6.72	2.13	2.41	.88
25.	6.75	6.35	2.36	4.17	.56
26.	6.05	6.46	2.63	4.82	.54
27.	6.00	5.58	2.65	2.36	1.13
28.	7.00	6.14	1.10	4.62	2.39
29.	6.25	6.50	9.45	4.36	.21
20.	5.75	6.12	2.17	3.08	.70

Degrees of Freedom
Between Groups = 1
Within Groups = 80

Levels of Significance
.05 > 3.97*
.01 > 7.00**

F-Values for the Differences Between Students Compared on the Basis of Grade Level.

Scale	Class Means: Sophom. (N=90) $\bar{X}$	Juni. (N=90) $\bar{X}$	Senior (N=90) $\bar{X}$	LSD .05	Mean Squares: Between Groups	Within Groups	F Value
1.	4.44	4.91	4.60	.70	5.08	5.62	.90
2.	6.11	5.60	5.29	.55	1.55	3.44	4.51*
3.	4.54	4.87	4.47	.47	4.05	2.49	1.62
4.	6.59	5.79	6.09	.58	1.47	3.92	3.74*
5.	2.86	2.87	2.46	.57	4.94	3.74	1.32
6.	5.69	5.14	4.90	.48	1.47	2.64	5.56**
7.	6.26	5.83	6.24	.65	5.21	4.81	1.08
8.	5.82	5.52	5.49	.52	3.03	3.05	.99
9.	4.31	4.85	4.74	.50	7.45	2.82	2.64
10.	5.92	6.22	6.33	.60	4.07	4.16	.98
11.	5.37	4.89	5.34	.64	6.54	4.67	1.40
12.	5.60	5.29	4.84	.48	1.30	2.62	4.95**
13.	4.97	4.31	4.36	.68	1.21	5.33	2.27
14.	6.06	5.12	5.30	.56	2.21	3.55	6.22**
15.	4.47	4.44	4.87	.48	5.08	2.65	1.91
16.	3.28	3.14	3.63	.43	5.75	2.14	2.68
17.	3.74	3.41	3.91	.62	5.83	4.34	1.34
18.	5.92	5.13	5.24	.51	1.64	3.02	5.44**
19.	6.57	6.90	7.10	.54	6.53	3.39	1.95
20.	5.21	4.86	4.62	.75	7.91	6.48	1.22
21.	5.67	5.51	6.00	.82	5.61	7.74	.73
22.	5.60	5.94	5.94	.45	3.56	2.35	1.52
23.	6.29	5.58	6.14	.53	1.27	3.23	3.94*
24.	6.37	6.49	6.70	.47	2.56	2.58	.99
25.	5.58	5.01	5.38	.57	7.43	3.74	1.99
26.	5.56	4.64	5.16	.55	1.92	3.48	5.57**
27.	4.86	4.70	5.04	.57	2.67	3.69	.73
28.	7.01	6.63	6.60	.52	4.69	3.17	1.48
29.	4.41	4.18	4.50	.65	2.49	2.81	.52
30.	5.46	5.24	5.06	.58	3.60	3.86	.93

Degrees of Freedom
Within Groups = 267
Between Groups = 2

Levels of Significance
.05 > 2.99*
.01 > 4.60**

F-Values for the Differences Between Students Compared on the Basis of Sex.

Scale	Means		Mean Squares		
	Male (N = 134)	Female (N = 136)	Between Groups	Within Groups	F Value
1.	5.06	4.24	4.58	5.47	8.38**
2.	5.50	5.82	6.74	3.51	1.91
3.	4.76	4.49	4.86	2.49	1.95
4.	6.06	6.24	2.04	4.01	.51
5.	2.91	2.54	9.05	3.72	2.43
6.	5.21	5.27	2.08	2.73	.07
7.	5.94	6.27	7.09	4.80	1.47
8.	5.56	5.61	5.13	3.05	.16
9.	4.61	4.65	8.27	2.86	.02
10.	5.94	6.37	1.27	4.12	3.09
11.	5.02	5.37	8.29	4.66	1.79
12.	4.94	5.54	2.46	2.61	9.40**
13.	4.52	4.56	1.29	5.39	.02
14.	5.10	5.87	4.00	3.55	11.26***
15.	4.63	4.55	4.63	2.68	.17
16.	3.40	3.30	6.95	2.17	.31
17.	3.49	3.88	1.02	4.33	2.36
18.	5.53	5.33	2.87	3.11	.92
19.	6.32	7.38	7.60	3.10	24.51***
20.	4.52	5.26	3.71	6.38	5.82*
21.	5.24	6.19	6.12	7.52	8.13**
22.	5.84	5.81	4.95	2.36	.02
23.	6.05	5.94	8.34	3.30	.25
24.	6.35	6.68	7.48	2.55	2.92
25.	4.78	5.85	7.71	3.49	22.10***
26.	4.97	5.27	6.15	3.55	1.73
27.	4.58	5.13	2.04	3.62	5.64*
28.	6.52	6.97	1.35	3.14	4.30*
29.	4.15	4.56	1.13	4.76	2.37
30.	5.14	5.35	2.80	3.86	.72

Degrees of Freedom
Within Groups = 268
Between Groups = 1

Levels of Significance
.05 > 3.84*
.01 > 6.64**
.001 > 10.83***

F-Values for the Differences Between Students Compared on the Basis of Their Perceived Grade Achievement.

Scale	Means: C & Below (N = 85)	Means: B & Above (N = 185)	Mean Squares: Between Groups	Mean Squares: Within Groups	F Value
1.	5.23	4.38	4.22	5.48	7.69**
2.	5.64	5.67	4.76	3.54	.01
3.	5.01	4.44	1.84	2.44	7.55**
4.	6.16	6.15	1.03	4.02	.002
5.	3.08	2.56	1.57	3.70	4.26*
6.	5.30	5.21	4.68	2.73	.17
7.	6.07	6.12	2.03	4.83	.04
8.	5.75	5.54	2.49	3.05	.81
9.	4.83	4.54	4.87	2.84	1.71
10.	6.16	6.15	3.68	4.17	.00
11.	5.34	5.13	2.47	4.68	.52
12.	5.31	5.21	6.64	2.70	.24
13.	4.81	4.42	8.86	5.36	1.65
14.	5.60	5.44	1.43	3.70	.38
15.	4.76	4.51	3.67	2.66	1.37
16.	3.25	3.39	1.07	2.17	.49
17.	3.77	3.64	9.51	4.36	.21
18.	5.54	5.38	1.44	3.12	.46
19.	6.76	6.89	1.02	3.38	.30
20.	5.01	4.84	1.65	6.51	.25
21.	4.91	6.09	8.10	7.45	10.87***
22.	5.94	5.77	1.54	2.36	.65
23.	5.95	6.02	3.19	3.30	.09
24.	6.51	6.51	9.44	2.58	.00
25.	5.35	5.30	1.17	3.77	.03
26.	5.28	5.04	3.18	3.56	.89
27.	4.77	4.90	1.00	3.69	.27
28.	7.11	6.57	1.69	3.13	5.40*
29.	4.09	4.48	8.96	4.77	1.87
30.	5.10	5.31	2.64	3.86	.68

Degrees of Freedom
Within Groups = 268
Between Groups = 1

Levels of Significance
.05 > 3.84*
.01 > 6.64**
.001 > 10.83***

F-Values for the Differences Between Students Compared on the Basis of Post-High School Educational Plans.

	Means		Mean Squares		
Scale	College (N = 185)	Non-College (N = 85)	Between Groups	Within Groups	F Value
1.	4.45	5.07	2.17	5.56	3.90*
2.	5.67	5.65	7.63	3.54	.002
3.	4.50	4.89	8.92	2.47	3.60
4.	6.13	6.20	2.45	4.01	.06
5.	2.53	3.14	2.13	3.68	5.81*
6.	5.25	5.22	5.42	2.73	.01
7.	6.14	6.04	5.08	4.82	.10
8.	5.50	5.83	6.23	3.03	2.05
9.	4.51	4.90	8.96	2.83	3.16
10.	6.10	6.27	1.53	4.16	.36
11.	5.10	5.41	5.56	4.67	1.18
12.	5.25	5.22	5.42	2.70	.02
13.	4.47	4.70	3.23	5.38	.60
14.	5.44	5.60	1.43	3.70	.38
15.	4.64	4.47	1.84	2.67	.68
16.	3.32	3.40	2.87	2.17	.13
17.	3.56	3.95	8.64	4.34	1.99
18.	5.40	5.49	4.58	3.12	.14
19.	6.78	7.00	2.58	3.37	.76
20.	4.80	5.10	5.44	6.49	.83
21.	5.91	5.30	2.18	7.67	2.85
22.	5.79	5.90	7.21	2.36	.30
23.	6.10	5.77	6.40	3.28	1.94
24.	6.47	6.62	1.36	2.58	.52
25.	5.32	5.31	2.59	3.77	.00
26.	5.02	5.32	5.32	3.58	1.49
27.	4.91	4.76	1.28	3.69	.34
28.	6.52	7.23	2.94	3.08	9.53**
29.	4.36	4.35	1.24	4.80	.002
30.	5.27	5.20	3.33	3.87	.08

Degrees of Freedom
Within Groups = 268
Between Groups = 1

Levels of Significance
.05 > 3.84*
.01 > 6.64**

F-Values for the Differences Between Students Compared on the Basis of Parental Educational Levels.

Scale	Means: 24 yrs. or less (N = 135)	Means: 25 yrs. or more (N = 135)	Mean Squares: Between Groups	Mean Squares: Within Groups	F Value
1.	4.67	4.62	1.33	5.64	.02
2.	5.48	5.85	9.25	3.51	2.63
3.	4.66	4.58	4.48	2.51	.17
4.	6.05	6.25	2.50	4.01	.62
5.	2.82	2.62	2.50	3.75	.66
6.	5.20	5.28	3.70	2.73	.13
7.	6.10	6.11	1.48	4.83	.003
8.	5.65	5.57	4.48	3.05	.14
9.	4.71	4.55	1.79	2.86	.62
10.	6.34	5.97	9.63	4.13	2.32
11.	5.42	4.97	1.33	4.64	2.86
12.	5.34	5.14	2.50	2.69	.92
13.	4.78	4.30	1.56	5.34	2.93
14.	5.54	5.43	8.33	3.70	.22
15.	4.81	4.37	1.33	2.63	5.06*
16.	3.44	3.25	2.31	2.16	1.06
17.	3.81	3.56	4.28	4.35	.98
18.	5.57	5.29	5.07	3.10	1.63
19.	6.78	6.92	1.33	3.38	.39
20.	5.09	4.69	1.08	6.47	1.66
21.	5.65	5.79	1.19	7.74	.15
22.	5.84	5.81	5.92	2.36	.02
23.	5.81	6.19	9.63	3.27	2.94
24.	6.58	6.45	1.20	2.58	.46
25.	5.47	5.17	6.22	3.75	1.65
26.	5.08	5.16	4.48	3.57	.12
27.	4.81	4.91	7.25	3.69	.19
28.	7.05	6.44	2.49	3.10	8.02**
29.	4.45	4.26	2.50	4.79	.52
30.	5.20	5.29	5.33	3.87	.13

Degrees of Freedom
Between Groups = 1
Within Groups = 268

Levels of Significance
.05 > 3.84*
.01 > 6.64**